BEACON LIGHTS OF HISTORY

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By JOHN LORD, LL. D.,

AUTHOR OF "THE OLD ROMAN WORLD," "MODERN EUROPE," ETC., ETC.

VOLUME VII.

PART I.

GREAT WRITERS.

DR. LORD'S UNCOMPLETED PLAN, SUPPLEMENTED WITH ESSAYS BY EMERSON, MACAULAY, HEDGE, AND MERCER ADAM.

PART II.

THE NEW ERA.

THE ACHIEVEMENT OF THE LAST FIFTY YEARS AS TYPIFIED BY CERTAIN REPRESENTATIVE CHARACTERS.

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PUBLISHERS' PREFACE.

THIS being the last possible volume in the series of "Beacon Lights of History" from the pen of Dr. Lord, its readers will be interested to know that it contains all the lectures that he had completed (although not all that he had projected) for his review of certain of the chief Men of Letters. Lectures on other topics were found among his papers, but none that would perfectly fit into this scheme; and it was thought best not to attempt any collection of his material which he himself had not deemed worthy or appropriate for use in this series, which embodies the best of his life's work, — all of his books and his lectures that he wished to have preserved. For instance, "The Old Roman World," enlarged in scope and rewritten, is included in the volumes on "Old Pagan Civilizations," "Ancient Achievements," and "Imperial Antiquity;" much of his "Modern Europe" reappears in "Great Rulers," "Modern European Statesmen," and "European National Leaders," etc.

The consideration of "Great Writers" was reserved by Dr. Lord for his final task, — a task interrupted by death and left unfinished. In order to round out and complete this volume, recourse has been had to some other masters in literary art, whose productions are added to Dr. Lord's final writings.

In the present volume, therefore, are included the paper on "Shakspeare" by Emerson, reprinted from his "Representative Men" by permission of Messrs. Houghton, Mifflin & Co., the authorized publishers of Emerson's works; the famous essay on "Milton" by Macaulay; the principal portion — biographical and generally critical — of the article on "Goethe," from "Hours with the German Classics," by the late Dr. Frederic H. Hedge, by permission of Messrs. Little, Brown & Co., the publishers of that work; and a chapter on "Tennyson: the Spirit of Modern Poetry," by G. Mercer Adam.

A certain advantage may accrue to the reader in finding these masters side by side for comparison and for gauging Dr. Lord's unique life-work by recognized standards, keeping well in view the purpose no less than the perfection of these literary performances, all of which, like those of Dr. Lord, were aimed at setting forth the services of *elected forces* in the world's life.

PART I.

GREAT WRITERS.

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JEAN JACQUES ROUSSEAU.

1712–1778.

SOCIALISM AND EDUCATION.

BEACON LIGHTS OF HISTORY.

ROUSSEAU.

SOCIALISM AND EDUCATION.

TWO great political writers in the eighteenth century, of antagonistic views, but both original and earnest, have materially affected the whole science of government, and even of social life, from their day to ours, and in their influence really belong to the nineteenth century. One was the apostle of radicalism; the other of conservatism. The one, more than any other single man, stimulated, though unwittingly, the French Revolution; the other opposed that mad outburst with equal eloquence, and caused in Europe a reaction from revolutionary principles. While one is far better known to-day than the other, to the thoughtful both are exponents and represent-

atives of conflicting political and social questions which agitate this age.

These men were Jean Jacques Rousseau and Edmund Burke, — one Swiss, and the other British. Burke I have already treated of in a former volume. His name is no longer a power, but his influence endures in all the grand reforms of which he was a part, and for which his generation in England is praised; while his writings remain a treasure-house of political and moral wisdom, sure to be drawn upon during every public discussion of governmental principles. Rousseau, although a writer of a hundred years ago, seems to me a fit representative of political, social, and educational ideas in the present day, because his theories are still potent, and even in this scientific age more widely diffused than ever before. Not without reason, it is true, for he embodied certain germinant ideas in a fascinating literary style; but it is hard to understand how so weak a man could have exercised such far-reaching influence.

Himself a genuine and passionate lover of Nature; recognizing in his principles of conduct no duties that could conflict with personal inclinations; born in democratic and freedom-loving Switzerland, and early imbued through his reading of German and English writers with ideas of liberty, — which in

those conservative lands were wholesome, — he distilled these ideas into charming literary creations that were eagerly read by the restless minds of France and wrought in them political frenzy The reforms he projected grew out of his theories of the "rights" of man, without reference to the duties that limit those rights; and his appeal for their support to men's passions and selfish instincts and to a sentimental philosophy, in an age of irreligion and immorality, aroused a political tempest which he little contemplated.

In an age so infidel and brilliant as that which preceded the French Revolution, the writings of Rousseau had a peculiar charm, and produced a great effect even on men who despised his character and ignored his mission. He engendered the Robespierres and Condorcets of the Revolution, — those sentimental murderers, who under the guise of philosophy attacked the fundamental principles of justice and destroyed the very rights which they invoked.

Jean Jacques Rousseau was born at Geneva in the year 1712, when Voltaire was first rising into notice. He belonged to the plebeian ranks, being the son of a watchmaker; was sickly, miserable, and morbid from a child; was poorly educated, but a great devourer of novels (which his father — sentimental as he — read with him), poetry, and

gushing biographies; although a little later he became, with impartial facility, equally delighted with the sturdy Plutarch. His nature was passionate and inconstant, his sensibilities morbidly acute, and his imagination lively. He hated all rules, precedents, and authority. He was lazy, listless, deceitful, and had a great craving for novelties and excitement,—as he himself says, "feeling everything and knowing nothing." At an early age, without money or friends, he ran away from the engraver to whom he had been apprenticed, and after various adventures was first kindly received by a Catholic priest in Savoy; then by a generous and erring woman of wealth lately converted to Catholicism; and again by the priests of a Catholic Seminary in Sardinia, under whose tuition, and in order to advance his personal fortunes, he abjured the religion in which he had been brought up, and professed Catholicism. This, however, cost him no conscientious scruples, for his religious training had been of the slimmest, and principles he had none.

We next see Rousseau as a footman in the service of an Italian Countess, where he was mean enough to accuse a servant girl of a theft he had himself committed, thereby causing her ruin. Again, employed as a footman in the service of another noble family, his extraordinary talents were detected, and

he was made secretary. But all this kindness he returned with insolence, and again became a wanderer. In his isolation he sought the protection of the Swiss lady who had before befriended him, Madame de Warens. He began as her secretary, and ended in becoming her lover. In her house he saw society and learned music.

A fit of caprice induced Rousseau to throw up this situation, and he then taught music in Chambéry for a living, studied hard, read Voltaire, Descartes, Locke, Hobbes, Leibnitz, and Puffendorf, and evinced an uncommon vivacity and talent for conversation, which made him a favorite in social circles. His chief labor, however, for five years was in inventing a system of musical notation, which led him to Lyons, and then, in 1741, to Paris.

He was now twenty-nine years old, — a visionary man, full of schemes, with crude opinions and unbounded self-conceit, but poor and unknown, — a true adventurer, with many agreeable qualities, irregular habits, and not very scrupulous morals. Favored by letters of introduction to ladies of distinction, — for he was a favorite with ladies, who liked his enthusiasm, freshness, elegant talk, and grand sentiments, — he succeeded in getting his system of musical notation examined, although not accepted, by the French Academy, and secured an

appointment as secretary in the suite of the Ambassador to Venice.

In this city Rousseau remained but a short time, being disgusted with what he called "official insolence," which did not properly recognize native genius. He returned to Paris as poor as when he left it, and lived in a cheap restaurant. There he made the acquaintance of his Thérèse, a healthy, amiable woman, but low, illiterate, unappreciative, and coarse, the author of many of his subsequent miseries. She lived with him till he died, — at first as his mistress and housekeeper, although later in life he married her. She was the mother of his five children, every one of whom he sent to a foundling hospital, justifying his inhumanity by those sophistries and paradoxes with which his writings abound, — even in one of his letters appealing for pity because he "had never known the sweetness of a father's embrace." With extraordinary self-conceit, too, he looked upon himself, all the while, in his numerous illicit loves, as a paragon of virtue, being apparently without any moral sense or perception of moral distinctions.

It was not till Rousseau was thirty-nine years of age that he attracted public attention by his writings, although earlier known in literary circles, — especially in that infidel Parisian *coterie*, where Diderot, Grimm

D'Holbach, D'Alembert, David Hume, the Marquis de Mirabeau, Helvetius, and other wits shined, in which circle no genius was acknowledged and no profundity of thought was deemed possible unless allied with those pagan ideas which Saint Augustine had exploded and Pascal had ridiculed. Even while living among these people, Rousseau had all the while a kind of sentimental religiosity which revolted at their ribald scoffing, although he never protested.

He had written some fugitive pieces of music, and had attempted and failed in several slight operettas, composing both music and words; but the work which made Rousseau famous was his essay on a subject propounded in 1749 by the Academy of Dijon: "Has the Progress of Science and the Arts Contributed to Corrupt or to Purify Morals?" This was a strange subject for a literary institution to propound, but one which exactly fitted the genius of Rousseau. The boldness of his paradox — for he maintained the evil effects of science and art — and the brilliancy of his style secured readers, although the essay was crude in argument and false in logic. In his "Confessions" he himself condemns it as the weakest of all his works, although "full of force and fire;" and he adds: "With whatever talent a man may be born, the art of writing is not easily

earned." It has been said that Rousseau got the idea of taking the "off side" of this question from his literary friend Diderot, and that his unexpected success with it was the secret of his life-long career of opposition to all established institutions. This is interesting, but not very authentic.

The next year, his irregular activity having been again stimulated by learning that his essay had gained the premium at Dijon, and by the fact of its great vogue as a published pamphlet, another performance fairly raised Rousseau to the pinnacle of fashion; and this was an opera which he composed, "Le Devin du Village" (The Village Sorcerer), which was performed at Fontainebleau before the Court, and received with unexampled enthusiasm. His profession, so far as he had any, was that of a copyist of music, and his musical taste and facile talents had at last brought him an uncritical recognition.

But Rousseau soon abandoned music for literature. In 1753 he wrote another essay for the Academy of Dijon, on the "Origin of the Inequality of Man," full of still more startling paradoxes than his first, in which he attempted to show, with great felicity of language, the superiority of savage life over civilization.

At the age of forty-two Rousseau revisited Protestant Geneva, abjured in its turn the Catholic faith.

and was offered the post of librarian of the city. But he could not live out of the atmosphere of Paris; nor did he wish to remain under the shadow of Voltaire, living in his villa near the City Gate of Geneva, who had but little admiration for Rousseau, and whose superior social position excited the latter's envy. Yet he professed to hate Paris with its conventionalities and fashions, and sought a quiet retreat where he could more leisurely pursue his studies and enjoy Nature, which he really loved. This was provided for him by an enthusiastic friend, — Madame d'Épinay, — in the beautiful valley of Montmorenci, and called "The Hermitage," situated in the grounds of her Château de la Chevrette. Here he lived with his wife and mother-in-law, he himself enjoying the hospitalities of the Château besides, — society of a most cultivated kind, also woods, lawns, parks, gardens, — all for nothing; the luxuries of civilization, the glories of Nature, and the delights of friendship combined. It was an earthly paradise, given him by enthusiastic admirers of his genius and conversation.

In this retreat, one of the most favored which a poor author ever had, Rousseau, ever craving some outlet for his passionate sentiments, created an ideal object of love. He wrote imaginary letters, dwelling with equal rapture on those he wrote and those he

fancied he received in return, and which he read to his lady friends, after his rambles in the forests and parks, during their reunions at the supper-table. Thus was born the "Nouvelle Héloïse," — a novel of immense fame, in which the characters are invested with every earthly attraction, living in voluptuous peace, yet giving vent to those passions which consume the unsatisfied soul. It was the forerunner of "Corinne," "The Sorrows of Werther," "Thaddeus of Warsaw," and all those sentimental romances which amused our grandfathers and grandmothers, but which increased the prejudice of religious people against novels. It was not until Sir Walter Scott arose with his wholesome manliness that the embargo against novels was removed.

The life which Rousseau lived at the Hermitage — reveries in the forest, luxurious dinners, and sentimental friendships — led to a passionate love-affair with the Comtesse d'Houdetot, a sister-in-law of his patroness Madame d'Épinay, — a woman not only married, but who had another lover besides. The result, of course, was miserable, — jealousies, piques, humiliations, misunderstandings, and the sundering of the ties of friendship, which led to the necessity of another retreat: a real home the wretched man never had. This was furnished, still in the vicinity of Montmorenci, by another aristocratic friend, the

Maréchal de Luxembourg, the fiscal agent of the Prince de Condé. And nothing to me is stranger than that this wandering, morbid, irritable man, without birth or fortune, the father of the wildest revolutionary and democratic doctrines, and always hated both by the Court and the Church, should have found his friends and warmest admirers and patrons in the highest circles of social life. It can be explained only by the singular fascination of his eloquence, and by the extreme stolidity of his worshippers in appreciating his doctrines, and the state of society to which his principles logically led

In this second retreat Rousseau had the *entrée* to the palace of the Duke of Luxembourg, where he read to the friends assembled at its banquets his new production, "Émile," — a singular treatise on education, not so faulty as his previous works, but still false in many of its principles, especially in regard to religion. This book contained an admirable and powerful impulse away from artificiality and towards naturalness in education, which has exerted an immense influence for good; we shall revert to it later.

A few months before the publication of "Émile," Rousseau had issued "The Social Contract," the most revolutionary of all his works, subversive of all precedents in politics, government, and the organization of society, while also confounding Christianity with

ecclesiasticism and attacking its influence in the social order. All his works obtained a wide fame before publication by reason of his habit of reading them to enthusiastic and influential friends who made them known.

"The Social Contract," however, dangerous as it was, did not when published arouse so much opposition as "Émile." The latter book, as we now see, contained much that was admirable; but its freedom and looseness in religious discussion called down the wrath of the clergy, excited the alarm of the government, and finally compelled the author to fly for his life to Switzerland.

Rousseau is now regarded as an enemy to Christian doctrine, even as he was a foe to the existing institutions of society In Geneva his books are publicly burned. Henceforth his life is embittered by constant persecution. He flies from canton to canton in the freest country in Europe, obnoxious not only for his opinions but for his habits of life. He affectedly adopts the Armenian dress, with its big fur bonnet and long girdled caftan, among the Swiss peasantry. He is as full of personal eccentricities as he is of intellectual crotchets. He becomes a sort of literary vagabond, with every man's hand against him. He now writes a series of essays, called "Letters from the Mountain," full of bitterness and anti-

Christian sentiments. So incensed by these writings are the country people among whom he dwells that he is again forced to fly.

David Hume, regarding him as a mild, affectionate, and persecuted man, gives Rousseau a shelter in England. The wretched man retires to Derbyshire, and there writes his "Confessions," — the most interesting and most dangerous of his books, showing a diseased and irritable mind, and most sophistical views on the immutable principles of both morality and religion. A victim of mistrust and jealousy, he quarrels with Hume, who learns to despise his character, while pitying the sensitive sufferings of one whom he calls "a man born without a skin."

Rousseau returns to France at the age of fifty-five. After various wanderings he is permitted to settle in Paris, where he lives with great frugality in a single room, poorly furnished, — supporting himself by again copying music, sought still in high society, yet shy, reserved, forlorn, bitter; occasionally making new friends, who are attracted by the infantine simplicity of his manners and apparent amiability, but losing them almost as soon as made by his petty jealousies and irritability, being "equally indignant at neglect and intolerant of attention."

Rousseau's declining health and the fear of his friends that he was on the borders of insanity led to

his last retreat, offered by a munificent friend, at Ermenonville, near Paris, where he died at sixty-six years of age, in 1778, as some think from poison administered by his own hand. The revolutionary National Assembly of France in 1790 bestowed a pension of fifteen hundred francs on his worthless widow, who had married a stable-boy soon after the death of her husband.

Such was the checkered life of Rousseau. As to his character, Lord Brougham says that "never was so much genius before united with so much weakness." The leading spring of his life was egotism. He never felt himself wrong, and the sophistries he used to justify his immoralities are both ludicrous and pitiable. His treatment of Madame de Warens, his first benefactor, was heartless, while the abandonment of his children was infamous. He twice changed his religion without convictions, for the advancement of his fortunes. He pretended to be poor when he was independent in his circumstances. He supposed himself to be without vanity, while he was notoriously the most conceited man in France. He quarrelled with all his friends. He made war on society itself. He declared himself a believer in Christianity, but denied all revelation, all miracles, all inspiration, all supernaturalism, and everything he

could not reconcile with his reason. His bitterest enemies were the atheists themselves, who regarded him as a hypocrite, since he professed to believe in what he undermined. The hostility of the Church was excited against him, not because he directly assailed Christianity, but because he denied all its declarations and sapped its authority.

Rousseau was, however, a sentimentalist rather than a rationalist, an artist rather than a philosopher. He was not a learned man, but a bold thinker. He would root out all distinctions in society, because they could not be reconciled with his sense of justice. He preached a gospel of human rights, based not on Christianity but on instinct. He was full of impracticable theories. He would have no war, no suffering, no hardship, no bondage, no fear, and even no labor, since these were evils, and, according to his notions of moral government, unnecessary. But in all his grand theories he ignored the settled laws of Providence, — even those of that "Nature" he so fervently worshipped, — all that is decreed concerning man or woman, all that is stern and real in existence; and while he uttered such sophistries, he excited discontent with the inevitable condition of man, he loosened family ties, he relaxed wholesome restraints, he infused an intense hatred of all conditions subject to necessary toil.

The life of this embittered philanthropist was as great a contradiction as were his writings. This benevolent man sends his own children to a foundling hospital. This independent man lives for years on the bounty of an erring woman, whom at last he exposes and deserts. This high-minded idealizer of friendship quarrels with every man who seeks to extricate him from the consequences of his own imprudence. This affectionate lover refuses a seat at his table to the woman with whom he lives and who is the mother of his children. This proud republican accepts a pension from King George III., and lives in the houses of aristocratic admirers without payment. This religious teacher rarely goes to church, or respects the outward observances of the Christianity he affects. This moral theorizer, on his own confession, steals and lies and cheats. This modest innocent corrupts almost every woman who listens to his eloquence. This lofty thinker consumes his time in frivolity and senseless quarrels. This patriot makes war on the institutions of his country and even of civilized life. This humble man turns his back on every one who will not do him reverence.

Such was this precursor of revolutions, this agitator, this hypocrite, this egotist, this lying prophet, — a man admired and despised, brilliant but indefinite, original but not true, acute but not wise; logical

but reasoning on false premises; advancing some great truths, but spoiling their legitimate effect by sophistries and falsehoods.

Why, then, discuss the ideas and influence of so despicable a creature? Because, sophistical as they were, those ideas contained truths of tremendous germinant power; because in the rank soil of his times they produced a vast crop of bitter, poisonous fruit, while in the more open, better aërated soil of this century they have borne and have yet to bear a fruitage of universal benefit. God's ways seem mysterious; it is for men patiently to study, understand, and utilize them.

Let us turn to the more definite consideration of the writings which have given this author so brilliant a fame. I omit any review of his operas and his system of musical notation, as not bearing on the opinions of society.

The first work, as I have said, which brought Rousseau into notice was the treatise for the Academy of Dijon, as to whether the arts and sciences have contributed to corrupt or to purify morals. Rousseau followed the bent of his genius, in maintaining that they have done more harm than good; and he was so fresh and original and brilliant that he gained the prize. This little work contains the germ of all his subsequent theories, especially that in which

he magnifies the state of nature over civilization,—an amazing paradox, which, however, appealed to society when men were wearied with the very pleasures for which they lived.

Rousseau's cant about the virtues engendered by ignorance, idleness, and barbarism is repulsive to every sound mind. Civilization may present greater temptations than a state of nature, but these are inseparable from any growth, and can be overcome by the valorous mind. Who but a madman would sweep away civilization with its factitious and remediable evils for barbarism with its untutored impulses and animal life? Here Rousseau makes war upon society, upon all that is glorious in the advance of intellect and the growth of morality, — upon the reason and aspirations of mankind. Can inexperience be a better guide than experience, when it encounters crime and folly? Yet, on the other hand, a plea for greater simplicity of life, a larger study of Nature, and a freer enjoyment of its refreshing contrasts to the hot-house life of cities, is one of the most reasonable and healthful impulses of our own day.

What can be more absurd, although bold and striking, than Rousseau's essay on the "Origin of Human Inequalities"! In this he pushes out the doctrine of personal liberty to its utmost logical sequence, so as to do away with government itself, and with

all regulation for the common good. We do not quarrel with his abstract propositions in respect to political equality; but his deductions strike a blow at civilization, since he maintains that inequalities of human condition are the source of all political and social evils, while Christianity, confirmed by common-sense, teaches that the source of social evils is in the selfish nature of man rather than in his outward condition. And further, if it were possible to destroy the inequalities of life, they would soon again return, even with the most boundless liberty Here common-sense is sacrificed to a captivating theory, and all the experiences of the world are ignored.

This shows the folly of projecting any abstract theory, however true, to its remote and logical sequence. In the attempt we are almost certain to be landed in absurdity, so complicated are the relations of life, especially in governmental and political science. What doctrine of civil or political economy would be applicable in all ages and all countries and all conditions? Like the ascertained laws of science, or the great and accepted truths of the Bible, political axioms are to be considered in their relation with other truths equally accepted, or men are soon brought into a labyrinth of difficulties and the strongest intellect is perplexed.

And especially will this be the case when a theory under consideration is not a truth but an assumption. That was the trouble with Rousseau. His theories, disdainful of experience, however logically treated, became in their remotest sequence and application insulting to the human understanding, because they were often not only assumptions, but assumptions of what was not true, although very specious and flattering to certain classes.

Rousseau confounded the great truth of the justice of moral and political equality with the absurd and unnatural demand for social and material equality. The great modern cry for equal opportunity for all is sound and Christian; but any attempt to guarantee individual success in using opportunity, to insure the lame and the lazy an equal rank in the race, must end in confusion and distraction.

The evil of Rousseau's crude theories or false assumptions was practically seen in the acceptance of their logical conclusions, which led to anarchy, murder, pillage, and outrageous excess. The great danger attending his theories is that they are generally half-truths, — truth and falsehood blended. His writings are sophistical. It is difficult to separate the truth from the error, by reason of the marvellous felicity of his language. I do not underrate his genius or his style. He was doubtless an

original thinker and a most brilliant and artistic writer; and by so much did he confuse people, even by the speciousness of his logic. There is nothing indefinite in what he advances. He is not a poet dealing in mysticisms, but a rhetorical philosopher, propounding startling theories, partly true and partly false, which he logically enforces with matchless eloquence.

Probably the most influential of Rousseau's writings was "The Social Contract," — the great text-book of the Revolution. In this famous treatise he advanced important ideas which undoubtedly are based on ultimate truth, such as that the people are the source of worldly power, that might does not make right, that slavery is an aggression on human rights; but with these ideal truths he combines the assertion that government is a contract between the governor and the governed. In a perfect state of society this may be the ideal; but society is not and never has been perfect, and certainly in all the early ages of the world governments were imposed upon people by the strong hand, irrespective of their will and wishes, — and these were the only governments which were fit and useful in that elder day. Governments, as a plain matter of fact, have generally arisen from circumstances and relations with which the people have had little to do. The Oriental monarchies were the

gradual outgrowth of patriarchal tradition and successful military leadership, and in regard to them the people were never consulted at all. The Roman Empire was ruled without the consent of the governed. Feudal monarchies in Europe were based on the divine rights of kings. There was no state in Europe where a compact or social contract had been made or implied. Even later, when the French elected Napoleon, they chose a monarch because they feared anarchy, without making any stipulation. There were no contracting parties.

The error of Rousseau was in assuming a social contract as a fact, and then reasoning upon the assumption. His premises are wrong, or at least they are nothing more than statements of what abstractly might be made to follow from the assumption that the people actually are the source of power, — a condition most desirable and in the last analysis correct, since even military despots use the power of the people in order to oppress the people, but which is practically true only in certain states. Yet, after all, when brought under the domain of law by the sturdy sense and utilitarian sagacity of the Anglo-Saxon race, Rousseau's doctrine of the sovereignty of the people is the great political motor of this century, in republics and monarchies alike.

Again, Rousseau maintains that, whatever acquisi-

tions an individual or a society may make, the right to this property must be always subordinate to the right which the community at large has over the possessions of all. Here is the germ of much of our present-day socialism. Whatever element of truth there may be in the theory that would regard land and capital, the means of production, as the joint possession of all the members of the community, — the basic doctrine of socialism, — any forcible attempt to distribute present results of individual production and accumulation would be unjust and dangerous to the last degree. In the case of the furious carrying out of this doctrine by the crazed French revolutionists, it led to outrageous confiscation, on the ground that all property belonged to the state, and therefore the representatives of the nation could do what they pleased with it. This shallow sophistry was accepted by the French National Convention when it swept away estates of nobles and clergy, not on the tenable ground that the owners were public enemies, but on the baseless pretext that their property belonged to the nation.

From this sophistry about the rights of property, Rousseau advanced another of still worse tendency, which was that the general will is always in the right and constantly tends to the public good. The theory is inconsistent with itself. Light and truth do not

come from the universal reason, but from the thoughts of great men stimulated into growth among the people. The teachers of the world belong to a small class. Society is in need of constant reforms, which are not suggested by the mass, but by a few philosophers or reformers, — the wise men who save cities.

Rousseau further says that a whole people can never become corrupted, — a most barefaced assertion. Have not all nations suffered periods of corruption? This notion, that the whole people cannot err, opens the door for any license. It logically leads to that other idea, of the native majesty of man and the perfectibility of society, which this sophist boldly accepted. Rousseau thought that if society were released from all law and all restraint, the good impulses and good sense of the majority would produce a higher state of virtue and wisdom than what he saw around him, since majorities could do no wrong and the universal reason could not err. In this absurdity lay the fundamental principle of the French Revolution, so far as it was produced by the writings of philosophers. This doctrine was eagerly seized upon by the French people, maddened by generations of oppression, poverty, and degradation, because it appealed to the pride and vanity of the masses, at that time congregated bodies of ignorance and wickedness.

Rousseau had an unbounded trust in human nature, — that it is good and wise, and will do the best thing if left to itself. But can anything be more antagonistic to all the history of the race? I doubt if Rousseau had any profound knowledge, or even really extensive reading. He was a dreamer, a theorist, a sentimentalist. He was the arch-priest of all sensationalism in the guise of logic. What more acceptable to the vile people of his age than the theory that in their collective capacity they could not err, that the universal reason was divine? What more logical than its culmination in that outrageous indecency, the worship of Reason in the person of a prostitute!

Again, Rousseau's notion of the limitations of law and the prerogative of the people, carried out, would lead to the utter subversion of central authority, and reduce nations to an absolute democracy of small communities. They would divide and subdivide until society was resolved into its original elements. This idea existed among the early Greek states, when a state rarely comprised more than a single city or town or village, such as might be found among the tribes of North American Indians. The great political question in Ancient Greece was the autonomy of cities, which kept the whole land in constant wars and dissensions and quarrels and jealousies.

and prevented that centralization of power which would have made Greece unconquerable and the mistress of the world. Our wholesome American system of autonomy in local affairs, with a common authority in matters affecting the general good, is organized liberty. But the ancient and outgrown idea of unregulated autonomy was revived by Rousseau; and though it could not be carried out by the French Revolutionists who accepted nearly all his theories, it led to the disintegration of France, and the multiplication of offices fatal to a healthy central power. Napoleon broke up all this in his centralized despotism, even if, to keep the Revolutionary sympathy, he retained the Departments which were substituted for the ancient Provinces.

The extreme spirit of democratic liberty which is the characteristic of Rousseau's political philosophy led to the advocacy of the wildest doctrines of equality. He would prevent the accumulation of wealth, so that, to use his words, "no one citizen should be rich enough to buy another, and no one so poor as to be obliged to sell himself." He would have neither rich people nor beggars. What could flow from such doctrines but discontent and unreasonable expectations among the poor, and a general fear and sense of insecurity among the rich? This "state of nature," moreover, in his view, could be

reached only by going backward and destroying all civilization, — and it was civilization which he ever decried, — a very pleasant doctrine to vagabonds, but likely to be treated with derisive mockery by all those who have something to conserve.

Another and most dangerous principle which was advocated in the "Social Contract" was that religion has nothing to do with the affairs of civil and political life; that religious obligations do not bind a citizen; that Christianity, in fact, ignores all the great relations of man in society. This is distinct from the Puritan doctrine of the separation of the Church from the State, by which is simply meant that clergy ought not to interfere in matters purely political, nor the government meddle with religious affairs, — a prime doctrine in a free State. But no body of men were ever more ardent defenders of the doctrine that all religious ideas ought to bear on the social and political fabric than the Puritans. They would break up slavery, if it derogated from the doctrine of the common brotherhood of man as declared by Christ, they would use their influence as Christians to root out all evil institutions and laws, and bring the sublime truths of the Master to bear on all the relations of life, — on citizens at the ballot-box, at the helm of power, and in legislative bodies. Christianity was to them the supreme law, with which all human

laws must harmonize. But Rousseau would throw out Christianity altogether, as foreign to the duties and relations of both citizens and rulers, pretending that it ignored all connection with mundane affairs and had reference only to the salvation of the soul, — as if all Christ's teachings were not regulative of the springs of conduct between man and man, as indicative of the relations between man and God! Like Voltaire, Rousseau not only accused the Church and Ecclesiastics of corruptness but did not recognize the fact that Church and Christianity are two different things. No one was more impatient of all restraints than Rousseau; yet he maintained that men, if calling themselves Christians, must submit to every wrong and injustice, looking for a remedy in the future world, — thus pouring contempt on those who had no right, according to his view of their system, to complain of injustice or strive to rise above temporal evils. Christianity, he said, inculcates servitude and dependence; its spirit is favorable to tyrants; true Christians are formed to be slaves, and they know it, and never trouble themselves about conspiracies and insurrections, since this transitory world has no value in their eyes. He denied that Christians could be good soldiers, — a falsehood rebuked for us by the wars of the Reformation, by the troops of Cromwell and Gustavus Adolphus, by our American soldiers in the

late Civil War. Thus he would throw away the greatest stimulus to heroism, — even the consciousness of duty, and devotion to great truths and interests.

I cannot follow out the political ideas of Rousseau in his various other treatises, in which he prepared the way for revolution and for the excesses of the Reign of Terror. The truth is, Rousseau's feelings were vastly superior to his thinking. Whatever of good is to result from his influence will arise out of the impulse he gave toward the search for ideals that should embrace the many as well as the few in their benefits; when he himself attempted to apply this impulse to philosophic political thought, his unregulated mind went all astray.

Let us now turn to consider a moment his doctrines pertaining to education, as brought out in his greatest and most unexceptionable work, his "Émile."

In this remarkable book everything pertaining to human life appears to be discussed. The duties of parents, child-management, punishments, perception and the beginning of thinking; toys, games, catechisms, all passions and sentiments, religion, friendship, love, jealousy, pity; the means of happiness, the pleasures and profits of travel, the principles of virtue, of justice and liberty; language, books; the nature of man and of woman, the arts of conventional life, politeness, riches, poverty, society, marriage, — on all

these and other questions he discourses with great sagacity and good sense, and with unrivalled beauty of expression, often rising to great eloquence, never dull or uninstructive, aiming to present virtue and vice in their true colors, inspiring exalted sentiments, and presenting happiness in simple pleasures and natural life.

This treatise is both full and original. The author supposes an imaginary pupil, named Émile, and he himself, intrusted with the care of the boy's education, attends him from his cradle to his manhood, assists him with the necessary directions for his general improvement, and finally introduces him to an amiable and unsophisticated girl, whose love he wins by his virtues and whom he honorably marries; so that, although a treatise, the work is invested with the fascination of a novel.

In reading this book, which made so great a noise in Europe, with so much that is admirable I find but little to criticise, except three things, which mar its beauty and make it both dangerous and false, in which the unsoundness of Rousseau's mind and character — the strange paradoxes of his life in mixing up good with evil — are brought out, and that so forcibly that the author was hunted and persecuted from one part of Europe to another on account of it.

The first is that he makes all natural impulses

generous and virtuous, and man, therefore, naturally good instead of perverse, — thus throwing not only Christianity but experience entirely aside, and laying down maxims which, logically carried out, would make society perfect if only Nature were always consulted. This doctrine indirectly makes all the treasures of human experience useless, and untutored impulse the guide of life. It would break the restraints which civilization and a knowledge of life impose, and reduce man to a primitive state. In the advocacy of this subtle falsehood, Rousseau pours contempt on all the teachings of mankind, — on all schools and colleges, on all conventionalities and social laws, yea, on learning itself. He always stigmatizes scholars as pedants.

Secondly, he would reduce woman to insignificance, having her rule by arts and small devices; making her the inferior of man, on whom she is dependent and to whose caprice she is bound to submit, — a sort of toy or slave, engrossed only with domestic duties, like the woman of antiquity. He would give new rights and liberties to man, but none to woman as man's equal, — thus keeping her in a dependence utterly irreconcilable with the bold freedom which he otherwise advocates. The dangerous tendency of his writings is somewhat checked, however, by the everlasting hostility with which women of char-

acter and force of will — such as they call "strong-minded" — will ever pursue him. He will be no oracle to them.

But a still more marked defect weakens "Émile" as one of the guide-books of the world, great as are its varied excellencies. The author undermines all faith in Christianity as a revelation, or as a means of man's communion with the Divine, for guidance, consolation, or inspiration. Nor does he support one of his moral or religious doctrines by an appeal to the Sacred Scriptures, which have been so deep a well of moral and spiritual wisdom for so many races of men. Practically, he is infidel and pagan, although he professes to admire some of the moral truths which he never applies to his system. He is a pure Theist or Deist, recognizing, like the old Greeks, no religion but that of Nature, and valuing no attainments but such as are suggested by Nature and Reason, which are the gods he worships from first to last in all his writings. The Confession of Faith by the Savoyard Vicar introduced into the fourth of the six "Books" of this work, which, having nothing to do with his main object, he unnecessarily drags in, is an artful and specious onslaught on all doctrines and facts revealed in the Bible, — on all miracles, all prophecies, and all supernatural revelation, — thus attacking Christianity in its most vital points, and making it of

no more authority than Buddhism or Mohammedanism. Faith is utterly extinguished. A cold reason is all that he would leave to man, — no consolation but what the mind can arrive at unaided, no knowledge but what can be reached by original scientific investigation. He destroys not only all faith but all authority, by a low appeal to prejudices, and by vulgar wit such as the infidels of a former age used in their heartless and flippant controversies. I am not surprised at the hostility displayed even in France against him by both Catholics and Protestants. When he advocated his rights of man, from which Thomas Paine and Jefferson himself drew their maxims, he appealed to the self-love of the great mass of men ground down by feudal injustices and inequalities, — to the sense of justice, sophistically it is true, but in a way which commanded the respect of the intellect. When he assailed Christianity in its innermost fortresses, while professing to be a Christian, he incurred the indignation of all Christians and the contempt of all infidels, — for he added hypocrisy to scepticism, which they did not. Diderot, D'Alembert, and others were bold unbelievers, and did not veil their hostilities under a weak disguise. I have never read a writer who in spirit was more essentially pagan than Rousseau, or who wrote maxims more entirely antagonistic to Christianity.

Aside from these great falsities, — the perfection of natural impulse, the inferiority of woman, and the worthlessness of Christianity, — as inculcated in this book, "Émile" must certainly be ranked among the great classics of educational literature. With these expurgated it confirms the admirable methods inspired by its unmethodical suggestions. Noting the oppressiveness of the usual order of education through books and apparatus, he scorns all tradition, and cries, "Let the child learn direct from Nature!" Himself sensitive and humane, having suffered as a child from the tyranny of adults, he demands the tenderest care and sympathy for children, a patient study of their characteristics, a gentle, progressive leading of them to discover for themselves rather than a cramming of them with facts. The first moral education should be negative, — no preaching of virtue and truth, but shielding from vice and error. He says: "Take the very reverse of the current practice, and you will almost always do right." This spirit, indeed, is the key to his entire plan. His ideas were those of the nineteenth, not the eighteenth century. Free play to childish vitality; punishment the natural inconvenience consequent on wrong-doing; the incitement of the desire to learn; the training of sense-activity rather than reflection, in early years; the acquirement of the power to learn

rather than the acquisition of learning, — in short, the natural and scientifically progressive rather than the bookish and analytically literary method was the end and aim of "Émile."

Actually, this book accomplished little in its own time, chiefly because of its attack on established religion. Influentially, it reappeared in Pestalozzi, the first practical reformer of methods; in Froebel, the inventor of the Kindergarten; in Spencer, the great systematizer of the philosophy of development; and through these its spirit pervades the whole world of education at the present time.

In Rousseau's "New Héloïse" there are the same contradictions, the same paradoxes, the same unsoundness as in his other works, but it is more eloquent than any. It is a novel in which he paints all the aspirations of the soul, all its unrest, all its indefinite longings, its raptures, and its despair; in which he unfetters the imagination and sanctifies every impulse, not only of affection, but of passion. This novel was the pioneer of the sentimental romances which rapidly followed in France and England and Germany, — worse than our sensational literature, since the author veiled his immoralities by painting the transports of passion under the guise of love, which ever has its seat in the affections and is sustained only by respect. Here Rousseau was a disguised

seducer, a poisoner of the moral sentiments, a foe to what is most sacred; and he was the more dangerous from his irresistible eloquence. His sophistries in regard to political and social rights may be met by reason, but not his attacks on the heart, with his imaginary sorrows and joys, his painting of raptures which can never be found. Here he undermines virtue as he had undermined truth and law. Here reprobation must become unqualified, and he appears one of the very worst men who ever exercised a commanding influence on a wicked and perverse generation.

And this view of the man is rather confirmed by his own "Confessions," — a singularly attractive book, yet from which, after the perusal of the long catalogue of his sorrows, joys, humiliations, triumphs, ecstasies and miseries, glories and shame, one rises with great disappointment, since no great truths, useful lessons, or even ennobling sentiments are impressed upon the mind to make us wiser or better. The "Confessions" are only a revelation of that sensibility, excessive and morbid, which reminds us of Byron and his misanthropic poetry, — showing a man defiant, proud, vain, unreasonable, unsatisfied, supremely worldly and egotistic. The first six Books are mere annals of sentimental debauchery; the last six, a kind of thermometer of friendship, containing an accurate account of kisses

given and received, with slights, huffs, visits, quarrels, suspicions, and jealousies, interspersed with grand sentiments and profound views of life and human nature, yet all illustrative of the utter vanity of earth, and the failure of all mortal pleasures to satisfy the cravings of an immortal mind. The "Confessions" remind us of "Manfred" and "Ecclesiastes" blended, — exceedingly readable, and often unexceptionable, where virtue is commended and vice portrayed in its true light, but on the whole a book which no unsophisticated or inexperienced person can read without the consciousness of receiving a moral taint; a book in no respect leading to repose or lofty contemplation, or to submission to the evils of life, which it catalogues with amazing detail; a book not even conducive to innocent entertainment. It is the revelation of the inner life of a sensualist, an egotist, and a hypocrite, with a maudlin although genuine admiration for Nature and virtue and friendship and love. And the book reveals one of the most miserable and dissatisfied men that ever walked the earth, seeking peace in solitude and virtue, while yielding to unrestrained impulses; a man of morbid sensibility, ever yearning for happiness and pursuing it by impossible and impracticable paths. No sadder autobiography has ever been written. It is a lame and impotent attempt at self-justification, revealing on every page

the writer's distrust of the virtues which he exalts, and of man whose reason and majesty he deifies, — even of the friendships in which he sought consolation, and of the retirements where he hoped for rest.

The book reveals the man. The writer has no hope or repose or faith. Nothing pleases him long, and he is driven by his wild and undisciplined nature from one retreat to another, by persecution more fancied than real, until he dies, not without suspicion of having taken his own life.

Such was Rousseau: the greatest literary genius of his age, the apostle of the reforms which were attempted in the French Revolution, and of ideas which still have a wondrous power, — some of which are grand and true, but more of which are sophistical, false, and dangerous. His theories are all plausible; and all are enforced with matchless eloquence of style, but not with eloquence of thought or true feeling, like the soaring flights of Pascal, — in every respect his superior in genius, because more profound and lofty. Rousseau's writings, like his life, are one vast contradiction, the blending of truth with error, — the truth valuable even when commonplace, the error subtle and dangerous, — so that his general influence must be considered bad wherever man is weak or credulous or inexperienced or perverse. I wish I

could speak better of a man whom so many honestly admire, and whose influence has been so marked during the last hundred years, and will be equally great for a hundred years to come; a man from whom Madame de Staël, Jefferson, and Lamartine drew so much of their inspiration, whose ideas about childhood have so helpfully transformed the educational methods of our own time. But I must speak my honest conviction, from the light I have, at the same time hoping that fuller light may justify more leniency to one of the great oracles whose doctrines are still cherished by many of the guides of modern thought.

SIR WALTER SCOTT.

1771–1832.

THE MODERN NOVEL.

SIR WALTER SCOTT.

THE MODERN NOVEL.

IN the early decades of the nineteenth century the two most prominent figures in English literature were Sir Walter Scott and Lord Byron. They are still read and admired, especially Scott; but it is not easy to understand the enormous popularity of these two men in their own day. Their busts or pictures were in every cultivated family and in almost every shop-window. Everybody was familiar with the lineaments of their countenances, and even with every peculiarity of their dress. Who did not know the shape of the Byronic collar and the rough, plaided form of "the Wizard of the North"? Who could not repeat the most famous passages in the writings of these two authors?

Is it so now? If not, what a commentary might be written on human fame! How transitory are the judgments of men in regard to every one whom fashion stamps! The verdict of critics is that only

some half-dozen authors are now read with the interest and glow which their works called out a hundred years ago. Even the novels of Sir Walter, although to be found in every library, kindle but little enthusiasm compared with that excited by the masterpieces of Thackeray, Dickens, George Eliot, and of the favorites of the passing day. Why is this? Will these later lights also cease to burn? Will they too pass away? Is this age so much advanced that what pleased our grandfathers and grandmothers has no charm for us, but is often "flat, stale, and unprofitable," — at least, decidedly uninteresting?

I am inclined to the opinion that only a very small part of any man's writings is really immortal. Take out the "Elegy in a Country Churchyard," and how much is left of Gray for other generations to admire? And so of Goldsmith: besides the "Vicar of Wakefield" and the "Deserted Village," there is little in his writings that is likely to prove immortal. Johnson wrote but little poetry that is now generally valued. Certainly his dictionary, his greatest work, is not immortal, and is scarcely a standard. Indeed, we have outgrown nearly everything which was prized so highly a century ago, not only in poetry and fiction, but in philosophy, theology, and science. Perhaps that is least permanent which once was regarded as most certain.

If, then, the poetry and novels of Sir Walter Scott are not so much read or admired as they once were, we only say that he is no exception to the rule. I have in mind but two authors in the whole range of English literature that are read and prized as much to-day as they were two hundred years ago. And if this is true, what shall we say of rhetoricians like Macaulay, of critics like Carlyle, of theologians like Jonathan Edwards, of historians like Hume and Guizot, and of many other great men of whom it has been the fashion to say that their works are lasting as the language in which they were written? Some few books will doubtless live, but, alas, how few! Where now are the eight hundred thousand in the Alexandrian library, which Ptolemy collected with so great care, — what, even, their titles? Where are the writings of Varro, said to have been the most learned man of all antiquity?

I make these introductory remarks to show how shallow is the criticism passed upon a novelist or poet like Scott, in that he is not now so popular or so much read as he was in his own day. It is the fate of most great writers, — the Augustines, the Voltaires, the Bayles of the world. It is enough to say that they were lauded and valued in their time, since this is about all we can say of most of the works supposed to be immortal. But when we remember the enthu-

siasm with which the novels of Scott were at first received, the great sums of money which were paid for them, and the honors he received from them, he may well claim a renown and a popularity such as no other literary man ever enjoyed. His eyes beheld the glory of a great name; his ears rang with the plaudits of idolaters; he had the consciousness of doing good work, universally acknowledged and gratefully remembered. Scarcely any other novelist ever created so much healthy pleasure combined with so much sound instruction. And, further, he left behind him a reproachless name, having fewer personal defects than any literary man of his time, being everywhere beloved, esteemed, and almost worshipped, whom distant travellers came to see, — sure of kind and gracious treatment; a hero in their eyes to the last, with no drawbacks such as marred the fame of Byron or of Burns. That so great a genius as Scott is fading in the minds of this generation may be not without comfort to those honest and hard-working men in every walk of human life who can say: We too were useful in our day, and had our share of honors and rewards, — all perhaps that we deserved, or even more. What if we are forgotten, as most men are destined to be? To live in the mouths of men is not the greatest thing or the best. "Act well your part, there all the honor lies," for

life after all is a drama or a stage. The supremest happiness is not in being praised; it is in the consciousness of doing right and being possessed with the power of goodness.

When, however, a man has been seated on such a lofty pinnacle as was Sir Walter Scott, we wish to know something of his personal traits, and the steps by which he advanced to fame. Was he overrated, as most famous men have been? What is the niche he will probably occupy in the temple of literary fame? What are the characteristics of his productions? What gave him his prodigious and extraordinary popularity? Was he a born genius, like Byron and Burns, or was he merely a most industrious worker, aided by fortunate circumstances and the caprices of fashion? What were the intellectual forces of his day, and how did he come to be counted among them?

All these points it is difficult to answer satisfactorily, but some light may be shed upon them. The bulky volumes of Lockhart's Biography constitute a mine of information about Scott, but are now heavy reading, without much vivacity,— affording a strong contrast to Boswell's Life of Johnson, which concealed nothing that we would like to know. A son-in-law is not likely to be a dispassionate biographer, especially when family pride and interests

restrain him. On the other hand, it is not wise for a biographer to be too candid, and belittle his hero by the enumeration of foibles not consistent with the general tenor of the man's life. Lockhart's knowledge of his subject and his literary skill have given us much; and, with Scott's own letters and the critical notice of his contemporaries, both the man and his works may be fairly estimated.

Most biographers aim to make the birth and parentage of their heroes as respectable as possible. Of authors who are "nobly born" there are very few; most English and Scotch literary men are descended from ancestors of the middle class, — lawyers, clergymen, physicians, small landed proprietors, merchants, and so on, — who were able to give their sons an education in the universities. Sir Walter Scott traced his descent to an ancient Scottish chief. His grandfather, Robert Scott, was bred to the sea, but, being shipwrecked near Dundee, he became a farmer, and was active in the cattle-trade. Scott's father was a Writer to the Signet in Edinburgh, — what would be called in England a solicitor, — a thriving, respectable man, having a large and lucrative legal practice, and being highly esteemed for his industry and integrity; a zealous Presbyterian, formal and precise in manner, strict in the observance of the Sabbath, and of all that he

considered to be right. His wife, Anne Rutherford, was the daughter of a professor of medicine in the University of Edinburgh, — a lady of rather better education than the average of her time; a mother whom Sir Walter remembered with great tenderness, and to whose ample memory and power of graphic description he owed much of his own skill in reproducing the past. Twelve children were the offspring of this marriage, although only five survived very early youth.

Walter, the ninth child, was born on the 15th of August, 1771, and when quite young, in consequence of a fever, lost for a time the use of his right leg. By the advice of his grandfather, Dr. Rutherford, he was sent into the country for his health. As his lameness continued, he was, at the age of four, removed to Bath, going to London by sea. Bath was then a noted resort, and its waters were supposed to cure everything. Here little Walter remained a year under the care of his aunt, when he returned to Edinburgh, to his father's house in George Square, which was his residence until his marriage, with occasional visits to the county seat of his maternal grandfather. He completely regained his health, although he was always lame.

From the autobiography which Scott began but did not complete, it would appear that his lame-

ness and solitary habits were favorable to reading; that even as a child he was greatly excited by tales and poems of adventure; and that as a youth he devoured everything he could find pertaining to early Scottish poetry and romance, of which he was passionately fond. He was also peculiarly susceptible to the beauties of Scottish scenery, being thus led to enjoy the country and its sports at a much earlier age than is common with boys,—which love was never lost, but grew with his advancing years. Among his fellows he was a hearty player, a forward fighter in boyish "bickers," and a teller of tales that delighted his comrades. He was sweet-tempered, merry, generous, and well-beloved, yet peremptory and pertinacious in pursuit of his own ideas.

In 1779, Walter was sent to the High School in Edinburgh; but his progress here was by no means remarkable, although he laid a good foundation for the acquisition of the Latin language. He also had a tutor at home, and from him learned the rudiments of French. With a head all on fire for chivalry and Scottish ballads, he admired the old Tory cavaliers and hated the Roundheads and Presbyterians. In three years he had become fairly familiar with Cæsar, Livy, Sallust, Virgil, Horace, and Terence. He also distinguished himself by making Latin verses. From the High School he entered the University of Edinburgh,

very well grounded in French and Latin. For Greek and mathematics he had an aversion, but made up for this deficiency by considerable acquisitions in English literature. He was delighted with both Ossian and Spenser, and could repeat the "Faërie Queene" by heart. His memory, like that of Macaulay, was remarkable. What delighted him more than Spenser were Hoole's translations of Tasso and Ariosto (later he learned Italian, and read these in the original), and Percy's "Reliques of Ancient Poetry." At college he also read the best novels of the day, especially the works of Richardson, Fielding, and Smollett. He made respectable progress in philosophy under the teaching of the celebrated Dugald Stewart and Professor Bruce, and in history under Lord Woodhouselee. On the whole, he was not a remarkable boy, except for his notable memory (which, however, kept only what pleased him), and his very decided bent toward the poetic and chivalric in history, life, and literature.

Walter was trained by his father to the law, and on leaving college he served the ordinary apprenticeship of five years in his father's office and attendance upon the law classes in the University; but the drudgery of the law was irksome to him. When the time came to select his profession, as a Writer to the Signet or an advocate, he preferred the latter; although success here was more uncertain than as a solicitor. Up to the time

of his admission to the bar he had read an enormous number of books, in a desultory way, and made many friends, some of whom afterwards became distinguished. His greatest pleasures were in long walks in the country with chosen companions. His love of Nature amounted to a passion, and in his long rambles he acquired not only vigorous health, but the capacity of undergoing great fatigue.

Scott's autobiography closes with his admission to the bar. From his own account his early career had not been particularly promising, although he was neither idle nor immoral. He was fond of convivial pleasures, but ever had uncommon self-control. All his instructors were gentlemanly, and he had access to the best society in Edinburgh, when that city was noted for its number of distinguished men in literature and in the different professions. His most intimate friends were John Irving, Sir Archibald Campbell, the Earl of Dalhousie, and Adam Ferguson, with whom he made excursions to the Highlands, and to ruined castles and abbeys of historic interest, — following with tireless search the new trail of an old Border ballad, or taking a thirty-mile walk to clear up some local legend of battle, foray, or historic event. In all these antiquarian raids the young fellows mingled freely with the people, and tramped the counties round about in most hilarious mood, by no means

escaping the habits of the day in tavern sprees and drinking-bouts, — although Scott's companions testify to his temperate indulgence.

The young lawyer was, indeed, unwittingly preparing for his mission to paint Scottish scenery so vividly, and Scottish character so charmingly, that he may almost be said to have created a new country which succeeding generations delight to visit. No man was ever a greater benefactor to Scotland, whose glories and beauties he was the first to reveal, showing how the most thrifty, practical, and parsimonious people may be at the same time the most poetic. Here Burns and he go hand in hand, although as a poet Scott declared that he was not to be named in the same day with the most unfortunate man of genius that his country and his century produced. How singular that in all worldly matters the greater genius should have been a failure, while he, who as a born poet was the lesser light, should have been the greatest popular success of which Scotland can boast! And yet there is something almost as pathetic and tragical in the career of the man who worked himself to death, as in that of the man who drank himself to death. The most supremely fortunate writer of his day came to a mournful end, notwithstanding his unparalleled honors and his magnificent rewards.

At the time Scott was admitted to the bar he was

not, of course, aware of his great original creative powers, nor could he have had very sanguine expectations of a brilliant career. The profession he had chosen was not congenial with his habits or his genius, and hence as a lawyer he was not a success. And yet he was not a failure, for he had the respect of some of the finest minds in Edinburgh, and at once gained as an advocate enough to support himself respectably among aristocratic people,—aided no doubt by his father who, as a prosperous Writer to the Signet, threw business into his hands. Amid his practice at the courts he found time to visit some of the most interesting spots in Scotland, and he had money enough to gratify his tastes. He was a thriving rather than a prosperous lawyer; that is to say, he earned his living.

But Scott was too much absorbed in literary studies and in writing ballads, to give to his numerous friends the hope of a distinguished legal career. No man can serve two masters. "His heart" was "in the Highlands a-chasing the deer," or ransacking distant villages for antiquarian lore, or collecting ancient Scottish minstrelsy, or visiting moss-covered and ivy-clad ruins, famous before John Knox swept monasteries and nunneries away as cages of unclean birds; but most of all was he interested in the feuds between the Lowland and Highland chieftains, and in the contest between Roundheads and Cavaliers when

Scotland lost her political independence. He did, however, find much in Scotch law to enrich his mind, with entanglements and antiquarian records, as well as the humors and tragedies of the courts; and of this his writings show many traces.

No young lawyer ever had more efficient friends than Walter Scott. And richly he deserved them, for he was generous, companionable, loyal, a brilliant story-teller, a good hunter and sportsman, bright, cheerful, and witty, doubtless one of the most interesting young men in his beautiful city; modest, too, and unpretentious, yet proud, claiming nothing that nothing might be denied him, a favorite in the most select circles. His most striking peculiarity was his good sense, keeping him from all exaggerations, which were always offensive to him. He was a Tory, indeed; but no aristocrat ever had a more genial humanity, taking pleasure in any society where he could learn anything. His appetite was so healthy, from his rural sports and pedestrian feats, that he could dine equally well on a broiled haddock or a saddle of venison, although from the minuteness of his descriptions of Scottish banquets one might infer that he had great appreciation of the pleasures of the table.

It is not easy to tell when Scott began to write poetry, but probably when he was quite young. He wrote for the pleasure of it, without any idea of devot-

ing his life to literature. Writing ballads was the solace of his leisure hours. His acquaintance with Francis, Lord Jeffrey began in 1791, at a club, where he read an essay on ballads which so much interested the future critic that he sought an introduction to its author, and the acquaintance thus begun between these two young men, both of whom unconsciously stood on the threshold of great careers, ripened into friendship. This happened before Scott was called to the bar in 1792. It was two years afterwards that he produced a poem which took by surprise a literary friend, Miss Cranstoun, and caused her to exclaim, "Upon my word, Walter Scott is going to turn out a poet, something of a cross between Burns and Gray!"

In 1795 Scott was appointed one of the Curators of the Advocates' Library, — a compliment bestowed only on those members of the bar known to have a zeal in literary affairs; but I do not read that he published anything until 1796, when appeared his translation from the German of Bürger's ballads, "The Wild Huntsman" and "Lenore." This called out high commendation from Dugald Stewart, the famous professor of moral philosophy in the University of Edinburgh, and from other men of note, but obtained no recognition in England.

It was during one of his rambles with his friend Ferguson to the English Lakes in 1797 that Scott met

Miss Charlotte Margaret Carpenter, or Charpentier, a young French lady of notable beauty and lovely character. She had an income of about £200 a year, which, added to his earnings as an advocate, then about £150, encouraged him to offer to her his hand For a young couple just starting in life £350 was an independence. The engagement met with no opposition from the lady's family; and in December of 1797 Scott was married, and took a modest house in Castle Street, being then twenty-six years of age. The marriage turned out to be a happy one, although *convenance* had something to do with it.

Of course, so healthy and romantic a nature as Scott's had not passed through the susceptible time of youth without a love affair. From so small a circumstance as the lending of his umbrella to a young lady (Margaret, the beautiful daughter of Sir John Belches) he enjoyed five years of affection and of what seems to have been a reasonable hope, which, however, was finally ended by the young lady's marrying Mr. William Forbes, a well-to-do banker, and later one of Scott's best friends. "Three years of dreaming and two years of waking," Scott calls it in one of his diaries, thirty years later; and his own marriage followed within a year after that of his lost love.

With an income sufficient only for the necessities of life, as a married man in society Scott had not much

to spare for expensive dinners, although given to hospitality. What money he could save was spent for books and travel. At twenty-six, he had visited what was most interesting in Scotland, either in scenery or historical associations, and some parts of England, especially the Cumberland Lakes. He took a cottage at Lasswade, near Edinburgh, and began there the fascinating pursuit of tree-planting and "place"-making. His vacations when the Courts were not in session were spent in excursions to mountain scenery and those retired villages where he could pick up antiquarian lore, particularly old Border ballads, heroic traditions of the times of chivalry, and of the conflicts of Scottish chieftains. Concerning these no man in Scotland knew so much as he, his knowledge furnishing the foundation alike of his lays and his romances. His enthusiasm for these scenic and historic interests was unquenchable, — a source of perpetual enjoyment, which made him a most acceptable visitor wherever he chose to go, both among antiquaries and literary men, and ladies of rank and fashion.

In March, 1799, Mr. and Mrs. Scott visited London, where they were introduced to many distinguished literary men. On their return to Edinburgh, the office of sheriff depute of Selkirkshire having become vacant, worth £300 a year, Scott received the appointment, which increased his income to about

£700. Although his labors were light, the office entailed the necessity of living in that county a few months in each year. It was a pastoral, quiet, peaceful part of the country, belonging to the Duke of Buccleuch, his friend and patron. His published translation in this year of Goethe's "Goetz of Berlichingen" added to his growing reputation, and led him on towards his career.

With a secure and settled income, Scott now meditated a literary life. A hundred years ago such a life was impossible without independent means, if a man would mingle in society and live conventionally, and what was called respectably. Even Burns had to accept a public office, although it was a humble one, and far from lucrative; but it gave him what poetry could not, — his daily bread. Hogg, peasant-poet of the Ettrick forest, was supported in all his earlier years by tending sheep and borrowing money from his friends.

The first genuine literary adventure of Scott was his collection of a "Scottish Minstrelsy," printed for him by James Ballantyne, a former schoolfellow, who had been encouraged by Scott to open a shop in Edinburgh. The preparation of this labor of love occupied the editor a year, assisted by John Leyden, a man of great promise, who died in India in 1811, having made a mark as an Orientalist. About this time began

Scott's memorable friendship with George Ellis, the most discriminating and useful of all his literary friends. In the same year he made the acquaintance of Thomas Campbell, the poet, who had already achieved fame by his "Pleasures of Hope."

It was in 1802 that the first and second volumes of the "Minstrelsy" appeared, in an edition of eight hundred copies, Scott's share of the profits amounting to £78 10*s.*, which did not pay him for the actual expenditure in the collection of his materials. The historical notes with which he elucidated the value of the ancient ballads, and the freshness and vigor of those which he himself wrote for the collection, secured warm commendations from Ellis, Ritson, and other friends, and the whole edition was sold; yet the work did not bring him wide fame. The third and last volume was issued in 1803.

The work is full of Scott's best characteristics, — wide historical knowledge, wonderful industry, humor, pathos, and a sympathetic understanding of life — that of the peasant as well as the knight — such as seizes the imagination. Lockhart quotes a passage of Scott's own self-criticism: "I am sensible that if there be anything good about my poetry, or prose either, it is *a hurried frankness of composition*, which pleases soldiers, sailors, and young people of bold and active dispositions." His ability to "toil terribly" in accum-

ulating choice material, and then, fusing it in his own spirit, to throw it forth among men with this "hurried frankness" that stirs the blood, was the secret of his power.

Scott did not become famous, however, until his first original poem appeared, — "The Lay of the Last Minstrel," printed by Ballantyne in 1805, and published by Longman of London, and Constable of Edinburgh. It was a great success; nearly fifty thousand copies were sold in Great Britain alone by 1830. For the first edition of seven hundred and fifty copies quarto, Scott received £169 6*s*., and then sold the copyright for £500.

In the meantime, a rich uncle died without children, and Scott's share of the property enabled him, in 1804, to rent from his cousin, Major-General Sir James Russell, the pretty property called Ashestiel, — a cottage and farm on the banks of the Tweed, altogether a beautiful place, where he lived when discharging his duties of sheriff of Selkirkshire. He has celebrated the charms of Ashestiel in the canto introduction to "Marmion." His income at this time amounted to about £1000 a year, which gave him a position among the squires of the neighborhood, complete independence, and leisure to cultivate his taste. His fortune was now made: with poetic fame besides, and powerful friends, he was a man every way to be envied.

"The Lay of the Last Minstrel" placed Scott among the three great poets of Scotland, for originality and beauty of rhyme. It is not marked by pathos or by philosophical reflections. It is a purely descriptive poem of great vivacity and vividness, easy to read, and true to nature. It is a tale of chivalry, and is to poetry what Froissart's "Chronicles" are to history. Nothing exactly like it had before appeared in English literature. It appealed to all people of romantic tastes, and was reproachless from a moral point of view. It was a book for a lady's bower, full of chivalric sentiments and stirring incidents, and of unflagging interest from beginning to end, — partly warlike and partly monastic, describing the adventures of knights and monks. It deals with wizards, harpers, dwarfs, priests, warriors, and noble dames. It sings of love and wassailings, of gentle ladies' tears, of castles and festal halls, of pennons and lances, —

> "Of ancient deeds, so long forgot,
> Of feuds whose memory was not,
> Of forests now laid waste and bare,
> Of towers which harbor now the hare."

In "The Lay of the Last Minstrel" there is at least one immortal stanza which would redeem the poem even if otherwise mediocre. How few poets can claim as much as this! Very few poems live except for some splendid passages which cannot be forgotten.

and which give fame. I know of nothing, even in Burns, finer than the following lines: —

"Breathes there the man, with soul so dead,
Who never to himself hath said,
This is my own, my native land!
Whose heart hath ne'er within him burned,
As home his footsteps he hath turned
From wandering on a foreign strand?
If such there breathe, go, mark him well!
For him no minstrel raptures swell;
High though his titles, proud his name,
Boundless his wealth as wish can claim, —
Despite those titles, power, and pelf,
The wretch, concentred all in self,
Living shall forfeit fair renown,
And, doubly dying, shall go down
To the vile dust from whence he sprung,
Unwept, unhonored, and unsung."

The favor with which "The Lay of the Last Minstrel" was received, greater than that of any narrative poem of equal length which had appeared for two generations, even since Dryden's day, naturally brought great commendation from Jeffrey, the keenest critic of the age, in the famous magazine of which he was the editor. The Edinburgh Review had been started only in 1802 by three young men of genius, — Jeffrey, Brougham, and Sydney Smith, — and had already attained great popularity, but not such marvellous influence as it wielded ten years afterwards, when nine

thousand copies were published every three months, and at such a price as gave to its contributors a splendid remuneration, and to its editors absolute critical independence. The only objection to this powerful periodical was the severity of its criticisms, which often also were unjust. It seemed to be the intent of the reviewers to demolish everything that was not of extraordinary merit. Fierce attacks are not criticism. The articles in the Edinburgh Review were of a different sort from the polished and candid literary dissections which made Ste.-Beuve so justly celebrated. In the beginning of the century, however, these savage attacks were all the fashion and to be expected; yet they stung authors almost to madness, as in the case of the review of Byron's early poetry. Literary courtesy did not exist. Justice gave place generally to ridicule or sarcasm. The Edinburgh Review was a terror to all pretenders, and often to men of real merit. But it was published when most judges were cruel and severe, even in the halls of justice.

The friendship between Scott and Jeffrey had been very close for ten years before the inception of the Edinburgh Review; and although Scott was (perhaps growing out of his love for antiquarian researches and admiration of the things that had been) an inveterate conservative and Tory, while the new Review was slashingly liberal and progressive, he was drawn in

by friendship and literary interest to be a frequent contributor during its first three or four years. The politics of the Edinburgh Review, however, and the establishment in 1808 of the conservative Quarterly Review, caused a gradual cessation of this literary connection, without marring the friendly relations between the two men.

About this time began Scott's friendship with Wordsworth, for whom he had great respect. Indeed, his modesty led him to prefer everybody's good poetry to his own. He felt himself inferior not only to Burns, but also to Wordsworth and Campbell and Coleridge and Byron, — as in many respects he undoubtedly was; but it requires in an author discernment and humility of a rare kind, to make him capable of such a discrimination.

More important to him than any literary friendship was his partnership with James Ballantyne, the printer, whom he had known from his youth. This in the end proved unfortunate, and nearly ruined him; for Ballantyne, though an accomplished man and a fine printer, as well as enterprising and sensible, was not a safe business man, being over-sanguine. For a time, however, this partnership, which was kept secret, was an advantage to both parties, although Scott embarked in the enterprise his whole available capital, about £5000. In connection with the publishing

business, soon added to the printing, with James Ballantyne's brother John as figure-head of the concern, — a talented but dissipated and reckless "good fellow," with no more head for business than either James Ballantyne or Scott, — the association bound Scott hand and foot for twenty years, and prompted him to adventurous undertakings. But it must be said that the Ballantynes always deferred to him, having for him a sentiment little short of veneration. One of the first results of this partnership was an eighteen-volume edition of Dryden's poems, with a Life, which must have been to Scott little more than drudgery. He was well paid for his work, although it added but little to his fame, except for intelligent literary industry.

Before the Dryden, however, in the same year, 1808, appeared the poem of "Marmion: A Tale of Flodden Field," which was received by the public with great avidity, and unbounded delight. Jeffrey wrote a chilling review, for which Scott with difficulty forgave him, since with all his humility and amiability he could not bear unfriendly or severe criticism.

In a letter to Joanna Baillie, Scott makes some very sensible remarks as to the incapability of such a man as Jeffrey appreciating a work of the imagination, distinguished as he was: —

"I really have often told him that I think he wants the taste for poetry which is essentially necessary to enjoy, and of course to criticize with justice. He is learned with the most learned in its canons and laws, skilled in its modulations, and an excellent judge of the justice of the sentiments which it conveys; but he wants that enthusiastic feeling which, like sunshine upon a landscape, lights up every beauty, and palliates if it cannot hide every defect. To offer a poem of imagination to a man whose whole life and study have been to acquire a stoical indifference towards enthusiasm of every kind, would be the last, as it would surely be the silliest, action of my life."

As stated above, it was about this time that Scott broke off his connection with the Edinburgh Review. Perhaps that was what Jeffrey wished, since the Review became thenceforth more intensely partisan, and Scott's Toryism was not what was wanted.

It is fair to add that in 1810 Jeffrey sent Scott advance proofs of his critique on "The Lady of the Lake," with a frank and friendly letter in which he says: —

"I am now sensible that there were needless asperities in my review of 'Marmion,' and from the hurry in which I have been forced to write, I dare say there may be some here also. . . . I am sincerely proud both of your genius and of your glory, and I value your friendship more highly than most either of my literary or political opinions."

Southey, Ellis, and Wordsworth, Erskine, Heber, and other friends wrote congratulatory letters about "Marmion," with slight allusions to minor blemishes. Lockhart thought that it was on the whole the greatest of Scott's poems, in strength and boldness. Most critics regarded the long introduction to each canto as a defect, since it broke the continuity of the narrative; but it may at least be said that these preludes give an interesting insight into the author's moods and views. The opinions of literary men of course differ as to the relative excellence of the different poems. "Marmion" certainly had great merit, and added to the fame of the author. There is here more variety of metre than in his other poems, and also some passages of such beauty as to make the poem immortal, — like the death of Marmion, and those familiar lines in reference to Clara's constancy: —

> "O woman! in our hours of ease,
> Uncertain, coy, and hard to please,
> And variable as the shade
> By the light, quivering aspen made, —
> When pain and anguish wring the brow,
> A ministering angel thou."

The sale of "Marmion" ultimately reached fifty thousand copies in Great Britain. The poem was originally published in a luxurious quarto at thirty-one and a-half shillings. Besides one thousand

guineas in advance, half the profits went to Scott, and must have reached several thousand pounds, — a great sale, when we remember that it was confined to libraries and people of wealth. In America, the poem was sold for two or three shillings, — less than one-tenth of what it cost the English reader. A successful poem or novel in England is more remunerative to the author, from the high price at which it is published, than in the United States, where prices are lower and royalties rarely exceed ten per cent. It must be borne in mind, however, that in England editions are ordinarily very small, sometimes consisting of not more than two hundred and fifty copies. The first edition of "Marmion" was only of two thousand copies. The largest edition published was in 1811, of five thousand copies octavo; but even this did not circulate largely among the people. The popularity of Scott in England was confined chiefly to the upper classes, at least until the copyright of his books had expired. The booksellers were not slow in availing themselves of Scott's popularity. They employed him to edit an edition of Swift for £1500, and tried to induce him to edit a general edition of English poets. That scheme was abandoned in consequence of a disagreement between Scott and Murray, the London publisher, as to the selection of poets.

I think the quarrels of authors eighty or one hundred years ago with their publishers were more frequent than they are in these times. We read of a long alienation between Scott and Constable, the publisher, who enjoyed a sort of monopoly of the poet's contributions to literature. Constable soon after found a great rival in Murray, who was at this time an obscure London bookseller in Fleet Street. Both these great publishers were remarkable for sagacity, and were bold in their ventures. The foundation of Constable's wealth was laid when he was publishing the Edinburgh Review. In 1809, Murray started the Quarterly Review, its great political rival, with the aid of Scott, who wrote many of its most valuable articles; and William Gifford, satirist and critic, became its first editor. Growing out of the quarrel between Scott and Constable was the establishment of John Ballantyne & Co. as publishers and booksellers in Edinburgh.

Shortly after the establishment of the Quarterly Review as a Tory journal, Scott began his third great poem, "The Lady of the Lake," which was published in 1810, in all the majesty of a quarto, at the price of two guineas a copy. He received for it two thousand guineas. The first edition of two thousand copies disappeared at once, and was followed the same year by four octavo editions In a few months the sale reached

twenty thousand copies. The poem received great commendation both from the Quarterly and the Edinburgh Review.

Mr. Ellis, in his article in the Quarterly, thus wrote:

"There is nothing in Scott of the severe majesty of Milton, or of the terse composition of Pope, or the elaborate elegance of Campbell, or the flowing and redundant diction of Southey; but there is a medley of bright images, and a diction tinged successively with the careless richness of Shakespeare, the antique simplicity of the old romances, the homeliness of vulgar ballads, and the sentimental glitter of the most modern poetry,—passing from the borders of the ludicrous to the sublime, alternately minute and energetic, sometimes artificial, and frequently negligent, but always full of spirit and vivacity, abounding in images that are striking at first sight to minds of every contexture, and never expressing a sentiment which it can cost the most ordinary reader any exertion to comprehend."

This seems to me to be a fair criticism, although the lucidity of Scott's poetry is not that which is most admired by modern critics. Fashion in these times delights in what is obscure and difficult to be understood, as if depth and profundity must necessarily be unintelligible to ordinary readers. In Scott's time, however, the fashion was different, and the popularity of his poems became almost universal. However, there are the same fire, vivacity, and brilliant color-

ing in all three of these masterpieces, as they were regarded two generations ago, reminding one of the witchery of Ariosto; yet there is no great variety in these poems such as we find in Byron, no great force of passion or depth of sentiment, but a sort of harmonious rhythm, — more highly prized in the earlier part of the century than in the latter, since Wordsworth and Tennyson have made us familiar with what is deeper and richer, as well as more artistic, in language and versification. But no one has denied Scott's originality and high merits, in contrast with the pompous tameness and conventionality of the poetry which arose when Johnson was the oracle of literary circles, and which still held the stage in Scott's day.

Even Scott's admirers, however, like Canning and Ellis, did not hesitate to say that they would like something different from anything he had already written. But this was not to be; and perhaps the reason why he soon after gave up writing poetry was the conviction that his genius as a poet did not lie in variety and richness, either of style or matter. His great fame was earned by his novels.

One thing greatly surprises me: Scott regarded Joanna Baillie as the greatest poetical genius of that day, and he derived more pleasure from reading Johnson's "London" and "The Vanity of Human Wishes" than from any other poetical composition. Indeed,

there is nothing more remarkable in literary history than Scott's admiration of poetry inferior to his own, and his extraordinary modesty in the estimate of his own productions. Most poets are known for their morbid vanity, their self-consciousness, their feeling of superiority, and their depreciation of superior excellence; but Scott had eminently a healthy mind, as he had a healthy body, and shrank from exaggeration as he did from vulgarity in all its forms. It is probable that his own estimate of his poetry was nearer the truth than that of his admirers, who were naturally inclined to be partial.

There has been so much poetry written since "The Lady of the Lake" was published, — not only by celebrated poets like Wordsworth, Southey, Moore, Byron, Campbell, Keats, Shelley, Tennyson, Browning, Longfellow, Lowell, Whittier, Bryant, but also by many minor authors, — that the standard is now much higher than it was in the early part of the century. Much of that which then was regarded as very fine is now smiled at by the critics, and neglected by cultivated readers generally; and Scott has not escaped unfavorable criticism.

It has been my object to present the subject of this Lecture historically rather than critically, — to show the extraordinary popularity of Scott as a poet among his contemporaries, rather than to estimate his merit

at the present time. I confess that most of "Marmion," as also of the "Lady of the Lake," is tame to me, and deficient in high poetic genius. Doubtless we are all influenced by the standards of our own time, and the advances making in literature as well as in science and art. Yet this change in the opinions of critics does not apply to Byron's "Childe Harold," which is as much, if not as widely, admired now as when it was first published. We think as highly too of "The Deserted Village," the "Elegy in a Country Churchyard," and the "Cotter's Saturday Night," as our fathers did. And men now think much more highly of the merits of Shakspeare than they have at any period since he lived; so that after all there is an element in true poetry which does not lose by time. In another hundred years, the verdicts of critics as to the greater part of the poems of Tennyson, Wordsworth, Browning, and Longfellow, may be very different from what they now are, while some of their lyrics may be, as they are now, pronounced immortal.

Poetry is both an inspiration and an art. The greater part of that which is now produced is made, not born. Those daintily musical and elaborate measures which are now the fashion, because they claim novelty, or reproduce the quaintness of an art so old as to be practically new, perhaps will soon again be forgotten or derided. What is simple, natural, appeal-

ing to the heart rather than to the head, may last when more pretentious poetry shall have passed away. Neither criticism nor contemporary popularity can decide such questions.

Scott himself seemed to take a true view. In a letter to Miss Seward, he said: —

"The immortality of poetry is not so firm a point in my creed as the immortality of the soul.

'I 've lived too long,
And seen the death of much immortal song.'

Nay, those that have really attained their literary immortality have gained it under very hard conditions. To some it has not attached till after death. To others it has been the means of lauding personal vices and follies which had otherwise been unremembered in their epitaphs; and all enjoy the same immortality under a condition similar to that of Noureddin in an Eastern tale. Noureddin, you remember, was to enjoy the gift of immortality, but with this qualification, — that he was subjected to long naps of forty, fifty, or a hundred years at a time. Even so Homer and Virgil slumbered through whole centuries. Shakspeare himself enjoyed undisturbed sleep from the age of Charles I., until Garrick waked him. Dryden's fame has nodded; that of Pope begins to be drowsy; Chaucer is as sound as a top, and Spenser is snoring in the midst of his commentators. Milton, indeed, is quite awake; but, observe, he was at his very outset refreshed with a nap of half-a-century; and in the midst of all this we sons of degeneracy talk

of immortality! Let me please my own generation, and let those who come after us judge of their facts and my performances as they please; the anticipation of their neglect or censure will affect me very little."

In 1812 the poet-lawyer was rewarded with the salary of a place whose duties he had for some years performed without pay, — that of Clerk of Sessions, worth £800 per annum. Thus having now about £1500 as an income, independently of his earnings by the pen, Scott gave up his practice as an advocate, and devoted himself entirely to literature. At the same time he bought a farm of somewhat more than a hundred acres on the banks of the beautiful Tweed, about five miles from Ashestiel, and leaving to its owners the pretty place in which he had for six years enjoyed life and work, he removed to the cottage at Abbotsford, — for thus he named his new purchase, in memory of the abbots of Melrose, who formerly owned all the region, and the ruins of whose lovely abbey stood not far away. Of the £4000 for this purchase half was borrowed from his brother, and the other half on the pledge of the profits of a poem that was projected but not written, — "Rokeby."

Scott ought to have been content with Ashestiel; or, since every man wishes to own his home, he should have been satisfied with the comfortable cottage which he built at Abbotsford, and the modest improvements

that his love for trees and shrubs enabled him to make. But his aspirations led him into serious difficulties. With all his sagacity and good sense, Scott never seemed to know when he was well off. It was a fatal mistake both for his fame and happiness to attempt to compete with those who are called great in England and Scotland, — that is, peers and vast landed proprietors. He was not alone in this error, for it has generally been the ambition of fortunate authors to acquire social as well as literary distinction, — thus paying tribute to riches, and virtually abdicating their own true position, which is higher than any that rank or wealth can give. It has too frequently been the misfortune of literary genius to bow down to vulgar idols; and the worldly sentiments which this idolatry involves are seen in almost every fashionable novel which has appeared for a hundred years. In no country is this melancholy social slavery more usual than in England, with all its political freedom, although there are noble exceptions. The only great flaw in Scott's character was this homage to rank and wealth.

On the other hand, rank and wealth also paid homage to him as a man of genius; both Scotland and England received him into the most select circles, not only of their literary and political, but of their fashionable, life.

In 1811 Scott published "The Lord of the Isles," and in 1813, "Rokeby," neither of which was remarkable for either literary or commercial success, although both were well received. In 1814 he edited a nineteen-volume edition of Dean Swift's works, with a Life, and in the same year began — almost by accident — the real work of his own career, in "Waverley."

If public opinion is far different to-day from what it was in Scott's time in reference to his poetry, we observe the same change in regard to the source of his widest fame, his novels, — but not to so marked a degree, for it was in fiction that Scott's great gifts had their full fruition. Many a fine intellect still delights in his novels, though cultivated readers and critics differ as to their comparative merits. No two persons will unite in their opinions as to the three of those productions which they like most or least. It is so with all famous novels. Then, too, what man of seventy will agree with a man of thirty as to the comparative merits of Scott, Dickens, Thackeray, Trollope, George Eliot, Eugene Sue, Victor Hugo, Balzac, George Sand? How few read "Uncle Tom's Cabin," compared with the multitudes who read that most powerful and popular book forty years ago? How changing, if not transient, is the fame of the novelist as well as of the poet! With reference to him even the same generation changes its tastes.

What filled us with delight as young men or women of twenty, is at fifty spurned with contempt or thrown aside with indifference. No books ever filled my mind and soul with the delight I had when, at twelve years of age, I read "The Children of the Abbey" and "Thaddeus of Warsaw." What man of eighty can forget the enthusiasm with which he read "Old Mortality" or "Ivanhoe" when he was in college?

Perhaps one test of a great book is the pleasure derived from reading it over and over again, — as we read "Don Quixote," or the dramas of Shakspeare, of whose infinite variety we never tire. Measured by this test, the novels of Sir Walter Scott are among the foremost works of fiction which have appeared in our world. They will not all retain their popularity from generation to generation, like "Don Quixote" or "The Pilgrim's Progress" or "The Vicar of Wakefield;" but these are single productions of their authors, while not a few of Scott's many novels are certainly still read by cultivated people, — if not with the same interest they excited when first published, yet with profit and admiration. They have some excellencies which are immortal, — elevation of sentiment, chivalrous regard for women, fascination of narrative (after one has waded through the learned historical introductory chapters), the absence of exaggeration, the vast variety of characters introduced and

vividly maintained, and above all the freshness and originality of description, both of Nature and of man. Among the severest and most bigoted of New England Puritans, none could find anything corrupting or demoralizing in his romances; whereas Byron and Bulwer were never mentioned without a shudder, and even Shakspeare was locked up in book-cases as unfit for young people to read, and not particularly creditable for anybody to own. The unfavorable comments which the most orthodox ever made upon Scott were as to the repulsiveness of the old Covenanters, as he described them, and his sneers at Puritan perfections. Scott, however, had contempt, not for the Puritans, but for many of their peculiarities, — especially for their cant when it degenerated into hypocrisy.

One thing is certain, that no works of fiction have had such universal popularity both in England and America for so long a period as the Waverley Novels. Scott reigned as the undisputed monarch of the realm of fiction and romance for twenty-five years. He gave undiminished entertainment to an entire generation — and not that merely, but instruction — in his historical novels, although his views were not always correct, — as whose ever are? He who could charm millions of readers, learned and unlearned, for a quarter of a century must have possessed remarkable genius. Indeed, he was not only the central figure in

English literature for a generation, but he was regarded as peculiarly original. Another style of novels may obtain more passing favor with modern readers, but Scott was justly famous; his works are to-day in every library, and form a delightful part of the education of every youth and maiden who cares to read at all; and he will as a novelist probably live after some who are now prime favorites will be utterly forgotten or ignored.

About 1830 Bulwer was in his early successes; about 1840 Dickens was the rage of his day; about 1850 Thackeray had taken his high grade; and it was about 1860 that George Eliot's power appeared. These still retain their own peculiar lines of popularity, — Bulwer with the romantic few, Thackeray with the appreciative intelligent, George Eliot with a still wider clientage, and Dickens with everybody, on account of his appeal to the universal sentiments of comedy and pathos. Scott's influence, somewhat checked during the growth of these reputations and the succession of fertile and accomplished writers on both sides of the Atlantic, — including the introspective analysts of the past fifteen years, — has within a decade been rising again, and has lately burst forth in a new group of historical romancers who seem to have "harked back" from the subjective fad of our day to Scott's healthy, adventurous objectivity. Not only so, but new editions

of the Waverley Novels are coming one by one from the shrewd publishers who keep track of the popular taste, one of the most attractive being issued in Edinburgh at half-a-crown a volume.

The first of Scott's remarkable series of novels, "Waverley," published in 1814 when the author was forty-three years of age and at the height of his fame as a poet, took the fashionable and literary world by storm. The novel had been partly written for several years, but was laid aside, as his edition of Swift and his essays for the supplement of the "Encyclopædia Britannica," and other prose writings, employed all the time he had to spare.

This hack-work was done by Scott without enthusiasm, to earn money for his investment in real estate, and is not of transcendent merit. Obscurer men than he had performed such literary drudgery with more ability, but no writer was ever more industrious. The amount of work which he accomplished at this period was prodigious, especially when we remember that his duties as sheriff and clerk of Sessions occupied eight months of the year. He was more familiar with the literary history of Queen Anne's reign than any subsequent historian, if we except Macaulay, whose brilliant career had not yet begun. He took, of course, a different view of Swift from the writers of the Edinburgh Review, and was probably too favorable in his

description of the personal character of the Dean of St. Patrick's, who is now generally regarded as "inordinately ambitious, arrogant, and selfish; of a morose, vindictive, and haughty temper, utterly destitute of generosity and magnanimity, as well as of tenderness, fidelity, and compassion." Lord Jeffrey, in his Review, attacked Swift's moral character with such consummate ability as to check materially the popularity of his writings, which are universally admitted to be full of genius. His superb intellect and his morality present a sad contrast, — as in the cases of Bacon, Burns, and Byron, — which Scott, on account of the force of his Tory prejudices, did not sufficiently point out.

But as to the novel, when it suddenly appeared, it is not surprising that "Waverley" should at once have attained an unexampled popularity when we consider the mediocrity of all works of fiction at that time, if we except the Irish tales of Maria Edgeworth. Scott received from Constable £1000 for this romance, then deemed a very liberal remuneration for what cost him but a few months' work. The second and third volumes were written in one month. He wrote with remarkable rapidity when his mind was full of the subject; and his previous studies as an antiquary and as a collector of Scottish poetry and legends fitted him for his work, which was in no sense a task, but a most lively pleasure.

It is not known why Scott published this strikingly original work anonymously; perhaps it was because of his unusual modesty, and the fear that he might lose the popularity he had already enjoyed as a poet. But it immediately placed him on a higher literary elevation, since it was generally suspected that he was the author. He could not altogether disguise himself from the keen eyes of Jeffrey and other critics.

The book was received as a revelation. The first volume is not particularly interesting, but the story continually increases in interest to its close. It is not a dissection of the human heart; it is not even much of a love-story, but a most vivid narrative, without startling situations or adventures. Its great charm is its quiet humor, — not strained into witty expressions which provoke laughter, but a sort of amiable delineation of the character of a born gentleman, with his weaknesses and prejudices, all leaning to virtue's side. It is a description of manners peculiar to the Scottish gentry in the middle of the eighteenth century, especially among the Jacobite families then passing away.

Of course the popularity of this novel, at that time, was chiefly confined to the upper classes. In the first place the people could not afford to pay the price of the book; and, secondly, it was outside their sympathies and knowledge. Indeed, I doubt if any common-

place person, without culture or extended knowledge, can enjoy so refined a work, with so many learned allusions, and such exquisite humor, which appeals to a knowledge of the world in its higher aspects. It is one of the last books that an ignorant young lady brought up on the trash of ordinary fiction would relish or comprehend. Whoever turns uninterested from "Waverley" is probably unable to see its excellencies or enjoy its peculiar charms. It is not a book for a modern school-boy or school-girl, but for a man or woman in the highest maturity of mind, with a poetic or imaginative nature, and with a leaning perhaps to aristocratic sentiments. It is a rebuke to vulgarity and ignorance, which the minute and exaggerated descriptions of low life in the pages of Dickens certainly are not.

In February, 1815, "Guy Mannering" was published, the second in the series of the Waverley Novels, and was received by the intelligent reading classes with even more *éclat* than "Waverley," to which it is superior in many respects. It plunges at once *in medias res*, without the long and labored introductory chapters of its predecessor. It is interesting from first to last, and is an elaborate and well-told tale, written *con amore*, when Scott was in the maturity of his powers. It is full of incident and is delightful in humor. Its chief excellence is in the

loftiness of its sentiments, — being one of the healthiest and wholesomest novels ever written, appealing to the heart as well as to the intellect, to be read over and over again, like "The Vicar of Wakefield," without weariness. It may be too aristocratic in its tone to please everybody, but it portrays the sentiments of its age in reference to squires and Scottish lairds, who were more distinguished for uprightness and manly duties than for brains and culture.

The fascination with which Scott always depicts the virtues of hospitality and trust in humanity makes a strong impression on the imagination. His heroes and heroines are not remarkable for genius, but shine in the higher glories of domestic affection and fidelity to trusts. Two characters in particular are original creations, — "Dominie Sampson" and "Meg Merrilies," whom no reader can forget, — the one, ludicrous for his simplicity; and the other a gypsy woman, weird and strange, more like a witch than a sibyl, but intensely human, and capable of the strongest attachment for those she loved.

"The easy and transparent flow of the style of this novel; its beautiful simplicity; the wild magnificence of its sketches of scenery; the rapid and ever brightening interest of the narrative; the unaffected kindness of feeling; the manly purity of thought, everywhere mingled with a gentle humor and homely sagacity, — but, above

all, the rich variety and skilful contrast of character and manners, at once fresh in fiction, and stamped with the unforgeable seal of truth and nature, spoke to every heart and mind; and the few murmurs of pedantic criticism were lost in the voice of general delight which never fails to welcome the invention that introduces to the sympathy of the imagination a new group of immortal realities."

Scott received about £2000 for this favorite romance, — one entirely new in the realm of fiction, — which enabled him to pay off his most pressing debts, and indulge his taste for travel. He visited the Field of Waterloo, and became a social lion in both Paris and London. The Prince of Wales sent him a magnificent snuff-box set with diamonds, and entertained him with admiring cordiality at Carlton House, — for his authorship of "Waverley" was more than surmised, while his fame as a poet was second only to that of Byron. Then (in the spring of 1815) took place the first meeting of these two great bards, and their successive interviews were graced with mutual compliments. Scott did not think that Byron's reading was extensive either in poetry or history, in which opinion the industrious Scottish bard was mistaken; but he did justice to Byron's transcendent genius, and with more charity than severity mourned over his departure from virtue. After a series of brilliant banquets at the

houses of the great, both of rank and of fame, Scott returned to his native land to renew his varied and exhausting labors, having furnished his publishers with a volume of letters on the subjects which most interested him during his short tour. Everything he touched now brought him gold.

"Paul's Letters to his Kinsfolk," as he called this volume concerning his tour, was well received, but not with the enthusiasm which marked the publication of "Guy Mannering;" indeed, it had no special claim to distinction. "The Antiquary" followed in May of the next year, and though it lacked the romance of "Waverley" and the adventure of "Guy Mannering," it had even a larger sale. Scott himself regarded it as superior to both; but an author is not always the best judge of his own productions, and we do not accept his criticism. It probably cost him more labor; but it is an exhibition of his erudition rather than a revelation of himself or of Nature. It is certainly very learned; but learning does not make a book popular, nor is a work of fiction the place for a display of learning. If "The Antiquary" were published in these times, it would be pronounced pedantic. Readers are apt to skip names and learned allusions and scraps of Latin. As a story I think it inferior to "Guy Mannering," although it has great merits, — "a kind of simple, unsought charm," — and

is a transcript of actual Scottish life. It had a great success; Scott says in a letter to his friend Terry: "It is at press again, six thousand having been sold in six days." Before the novel was finished, the author had already projected his "Tales of My Landlord."

Scott was now at the flood-tide of his creative power and his industry was as remarkable as his genius. There was but little doubt in the public mind as to the paternity of the Waverley Novels, and whatever Scott wrote was sure to have a large sale; so that every publisher of note was eager to have a hand in bringing his productions before the public. In 1816 appeared the "Edinburgh Annual Register," containing Scott's sketch of the year 1814, which, though very good, showed that the author was less happy in history than in fiction.

The first series of "Tales of My Landlord" was published by Murray, and not by Constable, who had brought out Scott's other works, and the book was received with unbounded enthusiasm. Many critics place "Old Mortality" in the highest niche of merit and fame. Frere of the Quarterly Review, Hallam, Boswell, Lamb, Lord Holland, all agreed that it surpassed his other novels. Bishop Heber said, "There are only two men in the world,—Walter Scott and Lord Byron." Lockhart regarded "Old Mortality"

as the "Marmion" of Scott's novels; but the painting of the Covenanters gave offence to the more rigid of the Presbyterians. For myself, I have doubt as to the correctness of their criticisms. "Old Mortality," in contrast with the previous novels of Scott, has a place similar to the later productions of George Eliot as compared with her earlier ones. It is not so vivid a sketch of Scotch life as is given in "Guy Mannering." Like "The Antiquary," it is bookish rather than natural. From a literary point of view, it is more artistic than "Guy Mannering," and more learned. "The canvas is a broader one." Its characters are portrayed with great skill and power, but they lack the freshness which comes from actual contact with the people described, and with whom Scott was familiar as a youth in the course of his wanderings. It is more historical than realistic. In short, "Old Mortality" is another creation of its author's brain rather than a painting of real life. But it is justly famous, for it was the precursor of those brilliant historical romances from which so much is learned of great men already known to students. It was a new departure in literature.

Before Scott arose, historical novels were comparatively unknown. He made romance instructive, rather than merely amusing, and added the charm of life to the dry annals of the past. Cervantes does not portray

a single great character known in Spanish history in his "Don Quixote," but he paints life as he has seen it. So does Goldsmith. So does George Eliot in "Silas Marner." She presents life, indeed, in "Romola," — not, however, as she had personally observed it, but as drawn from books, recreating the atmosphere of a long gone time by the power of imagination.

The earlier works of Scott are drawn from memory and personal feeling, rather than from the knowledge he had gained by study. Of "Old Mortality" he writes to Lady Louisa Stuart: "I am complete master of the whole history of these strange times, both of persecutors and persecuted; so I trust I have come decently off."

The divisional grouping of these earlier novels by Scott himself is interesting. In the "Advertisement" to "The Antiquary" he says: "The present work completes a series of fictitious narratives, intended to illustrate the manners of Scotland at three different periods. WAVERLEY embraced the age of our fathers ['T is Sixty Years Since'], GUY MANNERING that of our own youth, and THE ANTIQUARY refers to the last ten years of the eighteenth century." The dedication of "Tales of My Landlord" describes them as "tales illustrative of ancient Scottish manners, and of the traditions of their [his countrymen's] respective districts." They were — *First Series:* "The Black

Dwarf" and "Old Mortality;" *Second Series:* "The Heart of Mid-Lothian;" *Third Series:* "The Bride of Lammermoor" and "A Legend of Montrose;" *Fourth Series:* "Count Robert of Paris" and "Castle Dangerous." These all (except the fourth series, in 1832) appeared in the six years from 1814 to 1820, and besides these, "Rob Roy," "Ivanhoe," and "The Monastery."

With the publication of "Old Mortality" in 1816, then, Scott introduced the first of his historical novels, which had great fascination for students. Who ever painted the old Cameronian with more felicity. Who ever described the peculiarities of the Scottish Calvinists during the reign of the last of the Stuarts with more truthfulness, — their severity, their strict and Judaical observance of the Sabbath, their hostility to popular amusements, their rigid and legal morality, their love of theological dogmas, their inflexible prejudices, their lofty aspirations? Where shall we find in literature a sterner fanatical Puritan than John Balfour of Burley, or a fiercer royalist than Graham of Claverhouse? As a love-story this novel is not remarkable. It is not in the description of passionate love that Scott anywhere excels. His heroines, with two or three exceptions, would be called rather tame by the modern reader, although they win respect for their domestic virtues and sterling elements of char-

acter. His favorite heroes are either Englishmen of good family, or Scotchmen educated in England, — gallant, cultivated, and reproachless, but without any striking originality or intellectual force.

"Rob Roy" was published in the latter part of 1817, and was received by the public with the same unabated enthusiasm which marked the appearance of "Guy Mannering" and the other romances. An edition of ten thousand was disposed of in two weeks, and the subsequent sale amounted to forty thousand more. The scene of this story is laid in the Highlands of Scotland, with an English hero and a Scottish heroine; and in this fascinating work the political history of the times (forty years earlier than the period of "Waverley") is portrayed with great impartiality. It is a description of the first Jacobite rising against George I. in the year 1715. In this novel one of the greatest of Scott's creations appears in the heroine, Diana Vernon, — rather wild and masculine, but interesting from her courage and virtue. The character of Baillie Jarvie is equally original and more amusing.

The general effect of "Rob Roy," as well as of "Waverley" and "Old Mortality," was to make the Scottish Highlanders and Jacobites interesting to English readers of opposite views and feelings, without arousing hostility to the reigning royal family. The Highlanders a hundred years ago were viewed by the

English with sentiments nearly similar to those with which the Puritan settlers of New England looked upon the Indians, — at any rate, as freebooters, robbers, and murderers, who were dangerous to civilization; and the severities of the English government toward these lawless clans, both as outlaws and as foes of the Hanoverian succession, were generally condoned by public opinion. Scott succeeded in producing a better feeling among both the conquerors and the conquered. He modified general sentiment by his impartial and liberal views, and allayed prejudices. The Highlanders thenceforth were regarded as a body of men with many interesting traits, and capable of becoming good subjects of the Crown; while their own hatred and contempt of the Lowland Saxon were softened by the many generous and romantic incidents of these tales. Two hitherto hostile races were drawn into neighborly sympathy. Travellers visited the beautiful Highland retreats, and returned with enthusiastic impressions of the country. To no other man does Scotland owe so great a debt of gratitude as to Walter Scott, not only for his poetry and novels, but for showing the admirable traits of a barren country and a fierce population, and contributing to bring them within the realm of civilization. A century or two ago the Highlands of Scotland were peopled by a race

in a state of perpetual conflict with civilization, averse to labor, gaining (except such of them as were enrolled in the English Army) a precarious support by plunder, black-mailing, smuggling, and other illegal pursuits. Now they compose a body of hard-working, intelligent, and law-abiding laborers, cultivating farms, raising cattle and sheep, and pursuing the various branches of industry which lead to independence, if not to wealth. The traveller among the Highlanders feels as secure and is made as comfortable as in any part of the island; while revelations of their shrewd intelligence and unsuspected wit, in the stories of Barrie and Crockett, show what a century of Calvinistic theology — as the chief mental stimulant — has done in developing blossoms from that thistle-like stock.

Scott had now all the fame and worldly prosperity which any literary man could attain to, — for his authorship of the novels, although unacknowledged, was more and more generally believed, and after 1821 not denied. He lived above the atmosphere of envy, honored by all classes of people, surrounded with admiring friends and visitors. He had an income of at least £10,000 a year. Wherever he journeyed he was treated with the greatest distinction. In London he was cordially received as a distinguished guest in any circle he chose. The highest nobles paid homage

to him. The King made him a baronet, — the first purely literary man in England to receive that honor. He now became ambitious to increase his lands; and the hundred acres of farm at Abbotsford were enlarged by new purchases, picturesquely planted with trees and shrubberies, while "the cottage grew to a mansion, and the mansion to a castle," with its twelve hundred surrounding acres, cultivated and made beautiful.

Scott's correspondence with famous people was immense, besides his other labors as farmer, lawyer, and author. Few persons of rank or fame visited Edinburgh without paying their respects to its most eminent citizen. His country house was invaded by tourists. He was on terms of intimacy with some of the proudest nobles of Scotland. His various works were the daily food not only of his countrymen, but of all educated Europe. "Station, power, wealth, beauty, and genius strove with each other in every demonstration of respect and worship."

And yet in the midst of this homage and increasing prosperity, one of the most fortunate of human beings, Scott's head was not turned. His habitual modesty preserved his moral health amid all sorts of temptation. He never lost his intellectual balance. He assumed no airs of superiority. His manners were simple and unpretending to the last. He praised all literary productions except his own. His life in Edin-

burgh was plain, though hospitable and free; and he seemed to care for few luxuries aside from books, of which he made a large collection. The furniture of his houses in Edinburgh and at Abbotsford was neither showy nor luxurious. He was extraordinarily fond of dogs and all domestic animals, who — sympathetic creatures as they are — unerringly sought him out and lavished affection upon him.

When Scott lived in Castle Street he was not regarded by Edinburgh society as particularly brilliant in conversation, since he never aspired to lead by learned disquisitions. He told stories well, with great humor and pleasantry, to amuse rather than to instruct. His talk was almost homely. The most noticeable thing about it was common-sense. Lord Cockburn said of him that "his sense was more wonderful than his genius." He did not blaze like Macaulay or Mackintosh at the dinner-table, nor absorb conversation like Coleridge and Sydney Smith. "He disliked," says Lockhart, "mere disquisitions in Edinburgh and prepared impromptus in London." A *doctrinaire* in society was to him an abomination. Hence, until his fame was established by the admiration of the world, Edinburgh professors did not see his greatness. To them he seemed commonplace, but not to such men as Hallam or Moore or Rogers or Croker or Canning.

Notwithstanding Scott gave great dinners occa-

sionally, they appear to have been a bore to him, and he very rarely went out to evening entertainments, although at public dinners his wit and sense made him a favorite chairman. He retired early at night and rose early in the morning, and his severest labors were before breakfast, — his principal meal. He always dined at home on Sunday, with a few intimate friends, and his dinner was substantial and plain. He drank very little wine, and preferred a glass of whiskey-toddy to champagne or port. He could not distinguish between madeira and sherry. He was neither an epicure nor a gourmand.

After Scott had become world-famous, his happiest hours were spent in enlarging and adorning his land at Abbotsford, and in erecting and embellishing his baronial castle. In this his gains were more than absorbed. He loved that castle more than any of his intellectual creations, and it was not completed until nearly all his novels were written. Without personal extravagance, he was lavish in the sums he spent on Abbotsford. Here he delighted to entertain his distinguished visitors, of whom no one was more welcome than Washington Irving, whom he liked for his modesty and quiet humor and unpretending manners. Lockhart writes: "It would hardly, I believe, be too much to affirm that Sir Walter Scott entertained under his roof, in the course of the seven or eight

brilliant seasons when his prosperity was at its height, as many persons of distinction in rank, in politics, in art, in literature, and in science, as the most princely nobleman of his age ever did in the like space of time."

One more unconscious, apparently, of his great powers has been rarely seen among literary men, especially in England and France, — affording a striking contrast in this respect to Dryden, Pope, Voltaire, Byron, Bulwer, Macaulay, Carlyle, Hugo, Dumas, and even Tennyson. Great lawyers and great statesmen are rarely so egotistical and conceited as poets, novelists, artists, and preachers. Scott made no pretensions which were offensive, or which could be controverted. His greatest aspiration seems to have been to be a respectable landed proprietor, and to found a family. An English country gentleman was his beau-ideal of happiness and contentment. Perhaps this was a weakness; but it was certainly a harmless and amiable one, and not so offensive as intellectual pride. Scott indeed, while without vanity, had pride; but it was of a lofty kind, disdaining meanness and cowardice as worse even than transgressions which have their origin in unregulated passions.

From the numerous expletives which abound in Scott's letters, such as are not now considered in

good taste among gentlemen, I infer that like most gentlemen of his social standing in those times he was in the habit of using, when highly excited or irritated, what is called profane language. After he had once given vent to his feelings, however, he was amiable and forgiving enough for a Christian sage, who never harbored malice or revenge. He had great respect for the military profession, — probably because it was the great prop and defence of government and established institutions, for he was the most conservative of aristocrats. And yet his aristocratic turn of mind never conflicted with his humane disposition, — never made him a snob. He abhorred all vulgarity. He admired genius and virtue in whatever garb they appeared. He was as kind to his servants, and to poor and unfortunate people, as he was to his equals in society, being eminently big-hearted. It was only fools, who made great pretensions, that he despised and treated with contempt.

No doubt Scott was bored by the numerous visitors, whether invited or uninvited, who came from all parts of Great Britain, from America, and even from continental Europe, to do homage to his genius, or to gratify their curiosity. Sometimes as many as thirty guests sat down to his banqueting-table at once. He entertained in baronial style, but without ostentation

or prodigality, and on old-fashioned dishes. He did not like French cooking, and his simple taste in the matters of beverage we have already noted. The people to whom he was most attentive were the representatives of ancient families, whether rich or poor.

Scott was very kind to literary men in misfortune, and his chosen friends were authors of eminence, — like Miss Edgeworth, Joanna Baillie, Thomas Moore, Crabbe, Southey, Wordsworth, Sir Humphry Davy, Dr. Wollaston the chemist, Henry Mackenzie, etc. He was very intimate with the Duke of Buccleuch, Lord Montagu, and other noblemen. He was visited by dukes and princes, as well as by ladies of rank and fame. George IV. sent him valuable presents, and showed him every mark of high consideration. Cambridge and Oxford tendered to him honorary degrees. Wherever he travelled, he was received with honor and distinction and flatteries. But he did not like flatteries; and this was one reason why he did not openly acknowledge his authorship of his novels, until all doubt was removed by the masterly papers of John Leycester Adolphus in 1821.

Scott's correspondence must have been enormous, for his postage bills amounted to £150 per annum, besides the aid he received from franks, which with his natural economy he made no scruple in liberally

using. Perhaps his most confidential letters were, like Byron's, written to his publishers and printers, though many such were addressed to his son-in-law Lockhart, and to his dearest friend William Erskine. But he had also some admirable women friends, with whom he corresponded freely. Some of the choicest of his recently-published Letters are to Lady Abercorn, who was an intimate and helpful friend; to Miss Anna Seward, a literary confidant of many years; to Lady Louisa Stuart, daughter of the Earl of Bute, and granddaughter of Mary Wortley Montagu, one of the few who knew from the first of his "Waverley" authorship; and to Mrs. John Hughes, an early and most affectionate friend, whose grandson, Thomas Hughes, has made famous the commonplace name of "Tom Brown" in our own day.

Scott's letters show the man, — frank, cordial, manly, tender, generous, finding humor in difficulties, pleasure in toil, satisfaction in success, a proud courage in adversity, and the purest happiness in the affection of his friends.

How Scott found time for so much work is a mystery, — writing nearly three novels a year, besides other literary labors, attending to his duties in the Courts, overlooking the building of Abbotsford and the cultivation of his twelve hundred acres, and entertaining more guests than Voltaire did at Ferney.

He was too much absorbed by his legal duties and his literary labors to be much of a traveller; yet he was a frequent visitor to London, saw something of Paris, journeyed through Ireland, was familiar with the Lake region in England, and penetrated to every interesting place in Scotland. He did not like London, and took little pleasure in the ovations he received from people of rank and fashion. As a literary lion at the tables of "the great," he disappointed many of his admirers, since he made no effort to shine. It was only in his modest den in Castle Street, or in rambles in the country or at Abbotsford, that he felt himself at home, and appeared to the most advantage.

It would be pleasant to leave this genuinely great man in the full flush of health, creative power, inward delight and outward prosperity; but that were to leave unwritten the finest and noblest part of his life. It is to the misfortunes which came upon him that we owe both a large part of his splendid achievements in literature and our knowledge of the most admirable characteristics of the man.

My running record of his novels last mentioned "The Monastery," issued in 1820, in the same year with perhaps the prime favorite of all his works, "Ivanhoe," the romantic tale of England in the crusading age of Richard the Lion-Hearted. In 1821 he

put forth the fascinating Elizabethan tale of "Kenilworth." In 1822 came "The Pirate" (the tale of sea and shore that inspired James Fenimore Cooper to write "The Pilot" and his other sea-stories) and "The Fortunes of Nigel;" in 1823, "Peveril of the Peak" and "Quentin Durward," both among his best; in 1824, "St. Ronan's Well" and "Redgauntlet;" and in 1825, two more Tales of the Crusaders, — "The Betrothed" and "The Talisman," the latter probably sharing with "Ivanhoe" the greatest popularity.

In the winter of 1825–1826, a widespread area of commercial distress resulted in the downfall of many firms; and among others to succumb were Hurst & Robinson, publishers, whose failure precipitated that of Constable & Co., Scott's publishers, and of the Ballantynes his printers, with whom he was a secret partner, who were largely indebted to the Constables and so to the creditors of that house. The crash came January 16, 1826, and Scott found himself in debt to the amount of about £147,000, — or nearly $735,000.

Such a vast misfortune, overwhelming a man at the age of fifty-five, might well crush out all life and hope and send him into helpless bankruptcy, with the poor consolation that, though legally responsible, he was not morally bound to pay other people's debts. But Scott's own sanguine carelessness had been partly

to blame for the Ballantyne failure; and he faced the billow as it suddenly appeared, bowed to it in grief but not in shame, and, while not pretending to any stoicism, instantly resolved to devote the remainder of his life to the repayment of the creditors.

The solid substance of manliness, honor, and cheerful courage in his character; the genuine piety with which he accepted the "dispensation," and wrote "Blessed be the name of the Lord;" the unexampled steadiness with which he comforted his wife and daughters while girding himself to the daily work of intellectual production amidst his many distresses; the sweetness of heart with which he acknowledged the sympathy and declined the offers of help that poured in upon him from every side (one poor music teacher offering his little savings of £600, and an anonymous admirer urging upon him a loan of £30,000), — all this is the beauty that lighted up the black cloud of Scott's adversity. His efforts were finally successful, although at the cost of his bodily existence. Lockhart says: "He paid the penalty of health and life, but he saved his honor and his self-respect.

'The glory dies not, and the grief is past.'"

"Woodstock," then about half-done, was completed in sixty-nine days, and issued in March, 1826, bringing

in about $41,000 to his creditors. His "Life of Napoleon," published in June, 1827, produced $90,000. In 1827, also, Scott issued "Chronicles of the Canongate," First Series (several minor stories), and the First Series of "Tales of a Grandfather;" in 1828, "The Fair Maid of Perth" (Second Series of the "Chronicles"), and more "Tales of a Grandfather;" in 1829, "Anne of Geierstein," more "Tales of a Grandfather," the first volume of a "History of Scotland," and a collective edition of the Waverley Novels in forty-eight volumes, with new Introductions, Notes, and careful corrections and improvements of the text throughout, — in itself an immense labor; in 1830, more "Tales of a Grandfather," a three volume "History of France," and Volume II. of the "History of Scotland;" in 1831, and finally, a Fourth Series of "Tales of My Landlord," including "Count Robert of Paris" and "Castle Dangerous."

This completes the list of Scott's greater productions; but it should be remembered that during all the years of his creative work he was incessantly doing critical and historical writing, — producing numerous reviews, essays, ballads; introductions to divers works; biographical sketches for Ballantyne's "Novelist's Library," — the works of fifteen celebrated English writers of fiction, Fielding, Smollett, etc.; letters and pamphlets; dramas; even a few

religious discourses; and his very extensive and interesting private correspondence. He was such a marvel of productive brain-power as has seldom, if ever, been known to humanity.

The illness and death of Scott's beloved wife, but four short months after his commercial disaster, was a profound grief to him; and under the exhausting pressure of incessant work during the five years following, his bodily power began to fail, — so that in October, 1831, after a paralytic shock, he stopped all literary labor and went to Italy for recuperation. The following June he returned to London, weaker in both mind and body; was taken to Abbotsford in July; and on the 21st September, 1832, with his children about him, the kindly, manly, brave, and tender spirit passed away.

At the time of his death Sir Walter had reduced his great indebtedness to $270,000. A life insurance of $110,000, $10,000 in the hands of his trustees, and $150,000 advanced by Robert Cadell, an Edinburgh bookseller, on the copyrights of Scott's works, cleared away the last remnant of the debt; and within twenty years Cadell had reimbursed himself, and made a handsome profit for his own account and that of the family of Sir Walter.

The moneyed details of Scott's literary life have been made a part of this brief sketch, both because

his phenomenal fecundity and popularity offer a convenient measure of his power, and because the fiscal misfortune of his later life revealed a simple grandeur of character even more admirable than his mental force. "Scott ruined!" exclaimed the Earl of Dudley when he heard of the trouble. "The author of Waverley ruined! Good God! let every man to whom he has given months of delight give him a sixpence, and he will rise to-morrow morning richer than Rothschild!" But the sturdy Scotchman accepted no dole; he set himself to work out his own salvation. William Howitt, in his "Homes and Haunts of Eminent British Poets," estimated that Scott's works had produced as profits to the author or his trustees at least £500,000, — nearly $2,500,000: this in 1847, over fifty years ago, and only forty-five years from Scott's first original publication. Add the results of the past fifty years, and, remembering that this gives but the profits, conceive the immense sums that have been freely paid by the intelligent British public for their enjoyment of this great author's writings. Then, besides all this, recall the myriad volumes of Scott sold in America, which paid no profit to the author or his heirs. There is no parallel.

Voltaire's renown and monetary rewards, as the master-writer of the eighteenth century, offer the

only case in modern times that approaches Scott's success; yet Voltaire's vast wealth was largely the result of successful speculation. As a purely popular author, whose wholesome fancy, great heart, and tireless industry, has delighted millions of his fellowmen, Scott stands alone; while, as a man, he holds the affection and respect of the world. Even though it be that the fashion of his workmanship passeth away, wonder not, lament not. With Mithridates he could say, "I have lived." What great man can say more?

LORD BYRON.

1788–1824.

POETIC GENIUS.

LORD BYRON.

POETIC GENIUS.

IT is extremely difficult to depict Lord Byron, and even presumptuous to attempt it. This is not only because he is a familiar subject, the triumphs and sorrows of whose career have been often portrayed, but also because he presents so many contradictions in his life and character, — lofty yet degraded, earnest yet frivolous, an impersonation of noble deeds and sentiments, and also of almost every frailty which Christianity and humanity alike condemn. No great man has been more extravagantly admired, and none more bitterly assailed; but generally he is regarded as a fallen star, — a man with splendid gifts which he wasted, for whom pity is the predominant sentiment in broad and generous minds. With all his faults, the English-speaking people are proud of him as one of the greatest lights in our literature; and in view of the brilliancy of his literary career his own nation in particular does not like to have his de

fects and vices dwelt upon. It blushes and condones. It would fain blot out his life and much of his poetry if, without them, it could preserve the best and grandest of his writings, — that ill-disguised autobiography which goes by the name of "Childe Harold's Pilgrimage," in which he soars to loftier flights than any English poet from Milton to his own time. Like Shakespeare, like Dryden, like Pope, like Burns, he was a born poet; while most of the other poets, however eminent and excellent, were simply made, — made by study and labor on a basis of talent, rather than exalted by native genius as he was, speaking out what he could not help, and revelling in the richness of unconscious gifts, whether for good or evil.

Byron was a man with qualities so generous, yet so wild, that Lamartine was in doubt whether to call him angel or devil. But, whether angel or devil, his life is the saddest and most interesting among all the men of letters in the nineteenth century.

Of course, most of our material comes from his Life and Letters, as edited by his friend and brother-poet, Thomas Moore. This biographer, I think, has been unwisely candid in the delineation of Byron's character, making revelations that would better have remained in doubt, and on which friendship at least should have prompted him to a discreet silence.

Lord Byron was descended from the Byrons of Normandy who accompanied William the Conqueror in his invasion of England, of which illustrious lineage the poet was prouder than of his poetry. In the reign of Henry VIII., on the dissolution of the monasteries, a Byron came into possession of the old mediæval abbey of Newstead. In the reign of James I., Sir John Byron was made a knight of the Order of the Bath. In 1784 the father of the poet, a dissipated captain of the Guards, being in embarrassed circumstances, married a rich Scotch heiress of the name of Gordon. Handsome and reckless, "Mad Jack Byron" speedily spent his wife's fortune; and when he died, his widow, being reduced to a pittance of £150 a year, retired to Scotland to live, with her infant son who had been born in London. She was plain Mrs. Byron, widow of a "younger son," with but little expectation of future rank. She was a woman of caprices and eccentricities, and not at all fitted to superintend the education of her wayward boy.

Hence the childhood and youth of Byron were sad and unfortunate. His temper was violent and passionate. A malformation of his foot made him peculiarly sensitive, and the unwise treatment of his mother, fond and harsh by turns, destroyed maternal authority. At five years of age, he was

sent to a day-school in Aberdeen, where he made but slim attainments. Though excitable and ill-disciplined, he is said to have been affectionate and generous, and perfectly fearless. A fit of sickness rendered his removal from this school necessary, and he was sent to a summer resort among the Highlands. His early impressions were therefore favorable to the development of the imagination, coming as they did from mountains and valleys, rivulets and lakes, near the sources of the Dee. At the age of eight, he wrote verses and fell in love, like Dante at the age of nine.

On the death of the grandson of the old Lord Byron in 1794, this unpromising youth became the heir-apparent to the barony. Nor did he have to wait long; for soon after, his grand-uncle died, and the young Byron, whose mother was struggling with poverty, became a ward of Chancery; and the Earl of Carlisle — one of the richest and most powerful noblemen of the realm, a nephew by marriage of the deceased peer — was appointed his guardian. This cold, formal, and politic nobleman took but little interest in his ward, leaving him to the mismanagement of his mother, who, with her boy, at the age of ten, now removed to Newstead, the seat of his ancestors,—the government, meanwhile, for some reason which is not explained, having conferred on her a pension of £300 a year.

One of the first things that Mrs. Byron did on her removal to Newstead was to intrust her son to the care of a quack in Nottingham, in order to cure him of his lameness. As the doctor was not successful, the boy was removed to London with the double purpose of effecting a cure under an eminent surgeon, and of educating him according to his rank; for his education thus far had been sadly neglected, although it would appear that he was an omnivorous reader in a desultory kind of way. The lameness was never cured, and through life was a subject of bitter sensitiveness on his part. Dr. Glennie of Dulwich, to whose instruction he was now confided, found him hard to manage, because of his own undisciplined nature and the perpetual interference of his mother. His progress was so slow in Latin and Greek that at the end of two years, in 1801, he was removed to Harrow,—one of the great public schools of England, of which Dr. Drury was head-master. For a year or two, owing to that constitutional shyness which is so often mistaken for pride, young Byron made but few friendships, although he had for school-fellows many who were afterwards distinguished, including Sir Robert Peel. Before he left this school for Cambridge, however, he had made many friends whom he never forgot, being of a very generous and loving disposition. I think that those years at Harrow were the happiest

he ever knew, for he was under a strict discipline, and was too young to indulge in those dissipations which were the bane of his subsequent life. But he was not distinguished as a scholar, in the ordinary sense, although in his school-boy days he wrote some poetry remarkable for his years, and read a great many books. He read in bed, read when no one else read, read while eating, read all sorts of books, and was capable of great sudden exertions, but not of continuous drudgeries, which he always abhorred. In the year 1803, when a youth of fifteen, he formed a strong attachment for a Miss Chaworth, two years his senior, who, looking upon him as a mere school-boy, treated him cavalierly, and made some slighting allusion to "that lame boy." This treatment both saddened and embittered him. When he left school for college he had the reputation of being an idle and a wilful boy, with a very imperfect knowledge of Latin and Greek.

Young Byron entered Trinity College in 1805, poorly prepared, and was never distinguished there for those attainments which win the respect of tutors and professors. He wasted his time, and gave himself up to pleasures, — riding, boating, bathing, and social hilarities, — yet reading more than anybody imagined, and writing poetry, for which he had an extraordinary facility, yet not contending for college prizes. His

intimate friends were few, but to his chosen circle he was faithful and affectionate. No one at this time would have predicted his future eminence. A more unpromising youth did not exist within the walls of his college. He had a most unfortunate temper, which would have made him unhappy under any circumstances in which he could be placed. This temper, which he inherited from his mother — passionate, fitful, defiant, restless, wayward, melancholy — inclined him naturally to solitude, and often isolated him even from his friends and companions. He brooded upon supposed wrongs, and created in his soul strong likes and dislikes. What is worse, he took no pains to control this temperament; and at last it mastered him, drove him into every kind of folly and rashness, and made him appear worse than he really was.

This inborn tendency to moodiness, pride, and recklessness should be considered in our estimate of Byron, and should modify any harshness of judgment in regard to his character, which, in some other respects, was interesting and noble. He was not at all envious, but frank, warm-hearted, and true to those he loved, who were, however, very few. If he had learned self-control, and had not been spoiled by his mother, his career might have been far different from what it was, and would have sustained the

admiration which his brilliant genius called out from both high and low.

As it was, Byron left college with dangerous habits, with no reputation for scholarship, with but few friends, and an uncertain future. His bright and witty bursts of poetry, wonderful as the youthful effusions of Dryden and Pope, had made him known to a small circle, but had not brought fame, for which his soul passionately thirsted from first to last. For a nobleman he was poor and embarrassed, and his youthful extravagances had tied up his inherited estate. He was cast upon the world like a ship without a rudder and without ballast. He was aspiring indeed, but without a plan, tired out and disgusted before he was twenty-one, having prematurely exhausted the ordinary pleasures of life, and being already inclined to that downward path which leadeth to destruction. This was especially marked in his relations with women, whom generally he flattered, despised, and deserted, as the amusements of an idle hour, and yet whose society he could not do without in the ardor of his impulsive and ungoverned affections. In that early career of unbridled desire for excitement and pleasure, nowhere do we see a sense of duty, a respect for the opinions of the good, a reverence for religious institutions, or self-restraint of any kind; but these defects were partly covered over by his many virtues and his exalted rank.

Thus far Byron was comparatively unknown. Not yet was he even a favorite in society, beautiful and brilliant as he was; for he had few friends, not much money, and many enemies, whom he made by his scorn and defiance, — a born aristocrat, without having penetrated those exclusive circles to which his birth entitled him. He was always quarrelling with his mother, and was treated with indifference by his guardian. He was shunned by those who adhered to the conventionalities of life, and was pursued by bailiffs and creditors, — since his ancestral estates, small for his rank, were encumbered and mortgaged, and Newstead Abbey itself was in a state of dilapidation.

Within a year from leaving Cambridge, in 1807, Byron published a volume of his juvenile poems; and although they were remarkable for a young man of twenty, they were not of sufficient merit to attract the attention of the public. At this time he was abstemious in eating, wishing to reduce a tendency to corpulence. He could practise self-denial if it were to make his person attractive, especially to ladies. Nor was he idle. His reading, if desultory, was vast; and from the list of books which his biographer has noted it would seem that Macaulay never read more than Byron in a given time, — all the noted historians of England, Germany, Rome, and

Greece, with innumerable biographies, miscellanies, and even divinity, the raw material which he afterwards worked into his poems. How he found time to devour so many solid books is to me a mystery. These were not merely European works, but Asiatic also. He was not a critical scholar, but he certainly had a passing familiarity with almost everything in literature worth knowing, which he subsequently utilized, as seen in his "Childe Harold's Pilgrimage." A college reputation was nothing to him, any more than it was to Swift, Goldsmith, Churchill, Gibbon, and many other famous men of letters, who left on record their dislike of the English system of education. Among these were even such men as Addison, Cowper, Milton, and Dryden, who were scholars, but who alike felt that college honors and native genius did not go hand in hand, — which might almost be regarded as the rule, but for a few remarkable exceptions, like Sir Robert Peel and Gladstone. And yet it would be unwise to decry college honors, since not one in a hundred of those who obtain them by their industry, aptness, and force of will can lay claim to what is called genius, — the rarest of all gifts. Moreover, how impossible it is for college professors to detect in students, with whom they are imperfectly acquainted, extraordinary faculties, more especially if the young men are apparently

idle and negligent, and contemptuous of the college curriculum.

It was a bitter pill for Lord Byron when his juvenile poems, called "Hours of Idleness," were so severely attacked by the Edinburgh Review. They might have escaped the searching eyes of the critics had the author not been a lord. At that time the great Reviews had just been started; and it was the especial object of the Edinburgh Review to handle authors roughly, — to condemn and not to praise. Criticism was not then a science, as it became fifty years later, in the hands of Sainte-Beuve, who endeavored to review every production fairly and justly. There was nothing like justice entering into the head of Jeffrey or Sydney Smith or Brougham, or later on of Macaulay, whose articles were often written for political party effect. Critics, from the time of Swift down to the middle of the century, aimed to demolish enemies, and to make party capital; hence, as a general thing, their articles were not criticisms at all, but attacks. And as even an Achilles was vulnerable in his heel, so most intellectual giants have some weak point for the shafts of malice to penetrate. Yet it is the weaknesses of great men that people like to quote.

If Byron was humiliated, enraged, and embittered by the severity of the Edinburgh Review, he was not

crushed. He rallied, collected his unsuspected strength, and shattered his opponents by one of the wittiest, most brilliant, and most unscrupulous satires in our literature, which he called "English Bards and Scotch Reviewers." At the height of his fame he regretted and suppressed this youthful production of malice and bitterness. Yet it was the beginning of his great career, both as to a consciousness of his own powers and in attracting the public attention. It was doubtless unwise, since he attacked many who were afterwards his friends, and since he sowed the seeds of hatred among those who might otherwise have been his admirers or apologists. He had to learn the truth that "with what measure ye mete it shall be measured to you again." The creators of public opinion in reference to Byron have not been women of fashion, or men of the world, but literary lions themselves,—like Thackeray, who detested him, and the whole school of pharisaic ecclesiastical dignitaries, who abhorred in him sentiments which they condoned in Fielding, in Burns, in Rousseau, and in Voltaire.

Before his bitter satire was published, however, Byron took his seat in the House of Lords, not knowing any peer sufficiently to be introduced by him. His guardian, Lord Carlisle, treated him very shabbily, refusing to furnish to the Lord Chancellor some important information of a technical kind

which refusal delayed the ceremony for several weeks, until the necessary papers could be procured from Cornwall relating to the marriage of one of his ancestors. Unfriended and alone, Byron sat on the scarlet benches of the House of Lords until he was formally admitted as a peer. But when the Lord Chancellor left the woolsack to congratulate him, and with a smiling face extended his hand, the embittered young peer bowed coldly and stiffly, and simply held out two or three of his fingers,—an act of impudence for which there was no excuse.

It is difficult to understand why Lord Byron should have had so few friends or even acquaintances at that time among people of his rank. At twenty-one, he was a lonely and solitary man, mortified by the attack of the Edinburgh Review, exasperated by injustice, morose even to misanthropy, and decidedly sceptical in his religious opinions. Newstead Abbey was a burden to him, since he could not keep it up. He owed £10,000. He had no domestic ties, except to a mother with whom he could not live. His poetry had not brought him fame, for which of all things he most ardently thirsted. His love affairs were unfortunate, and tinged his soul with sadness and melancholy. Nor had fashion as yet marked him for her own. He craved excitement, and society to him was dull and conventional.

It is not surprising that under these circumstances Byron made up his mind to travel: he did not much care whither, provided he had new experiences. "The grand tour" which educated young men of leisure and fortune took in that day had no charm for him, since he wished to avoid rather than to seek society in those cities which the English frequented. He did not care to see the literary lions of France or Germany or Italy, for though a nobleman, he was too young and unimportant to be much noticed, and he was too shy and too proud to make advances which might be rebuffed, wounding his *amour propre*.

He set out on his pilgrimage the latter part of June, 1809, in a ship bound for Lisbon, with a small suite of servants. Going to a land where Nature was most enchanting, he was sufficiently enthusiastic over the hills and vales and villages of Portugal. As for comfort, he expected little, and found less; but to this he was indifferent so long as he could swim in the Tagus, and ride on a mule, and procure eggs and wine. He was delighted with Cadiz, to him a Cythera, with its beautiful but uneducated women, where the wives of peasants were on a par with the wives of dukes in cultivation, and where the minds of both had but one idea, — that of intrigue. He hastily travelled through Spain on horseback, in August,

reaching Gibraltar, from which he embarked for Malta and the East.

It was Greece and Turkey that Byron most wished to see and know; and, favored by introductions, he was cordially received by governors and pashas. At Athens, and other classical spots, he lingered enchanted, yet suppressing his enthusiasm in the contempt he had for the affected raptures of ordinary travellers. It was not the country alone, with its classical associations, which interested him, but also its maidens, with their dark hair and eyes, whom he idealized almost into goddesses. Everything he saw was picturesque, unique, and fascinating. The days and weeks flew rapidly away in dreamy enchantment.

After nearly three months at Athens, Byron embarked for Smyrna, and explored the ruins of the old Ionian cities, thence proceeding to Constantinople, with a view of visiting Persia and the farther East. In a letter to Mr. Henry Drury, he says: —

"I have left my home, and seen part of Africa and Asia, and a tolerable portion of Europe. I have been with generals and admirals, princes and pashas, governors and ungovernables. Albania, indeed, I have seen more than any Englishman, except Mr. Leake, — a country rarely visited, from the savage character of the natives, but abounding more in natural beauties than the classical regions of Greece."

A glimpse of Byron's inner life at this time is caught in the following extract from a letter to another friend:

"I have now been nearly a year abroad, and hope you will find me an altered personage, — I do not mean in body, but in manners; for I begin to find out that nothing but virtue will do in this d—d world. I am tolerably sick of vice, which I have tried in its agreeable varieties, and mean on my return to cut all my dissolute acquaintance, leave off wine and carnal company, and betake myself to politics and decorum."

One thing we notice in most of the familiar letters of Byron, — that he makes frequent use of a vulgar expletive. But when I remember that the Prince of Wales, the Lord Chancellor, the judges, the lawyers, the ministers of the Crown, and many other distinguished people were accustomed to use the same expression, I would fain hope that it was not meant for profanity, but was a sort of fashionable slang intended only to be emphatic. Fifty years have seen a great improvement in the use of language, and the vulgarism which then appeared to be of slight importance is now regarded, almost universally with gentlemen, to be at least in very bad taste. How far Byron transgressed beyond the frequent use of this expletive, does not appear either in his letters or in his biography; yet from his irreverent nature, and the society with which he was associated, it is

more than probable that in him profanity was added to the other vices of his times.

Especially did he indulge in drinking to excess in all convivial gatherings. It was seldom that gentlemen sat down to a banquet without each despatching two or three bottles of wine in the course of an evening. No wonder that gout was the pervading disease among county squires, and even among authors and statesman. Morality was not one of the features of English society one hundred years ago, except as it consisted in a scrupulous regard for domesticity, truth, and honor, and abhorrence of meanness and hypocrisy.

It would be difficult to point out any defects and excesses of which Byron was guilty at this period beyond what were common to other fashionable young men of rank and leisure, except a spirit of religious scepticism and impiety, and a wanton and inexcusable recklessness in regard to women, which made him a slave to his passions. The first alienated him, so far as he was known, from the higher respectable classes, who generally were punctilious in the outward observances of religion; and the second made him abhorred by the virtuous middle class, who never condoned his transgressions in this respect. But at this time his character was not generally known. It was not until he was seated on the pinnacle of

fame that public curiosity penetrated the scandals of his private life. He was known only as a young nobleman in quest of the excitements of foreign travel, and his letters of introduction procured him all the society he craved. Not yet had he expressed bitterness and wrath against the country which gave him birth; he simply found England dull, and craved adventures in foreign lands as unlike England as he could find. The East stimulated his imagination, and revived his classical associations. He saw the Orient only as an enthusiastic poet would see it, and as Lamartine saw Jerusalem. But Byron was more curious about the pagan cities of antiquity than concerning the places consecrated by the sufferings of our Lord. He cared more to swim across the Hellespont with Leander than to wander over the sacred hills of Judæa; to idealize a beautiful peasant girl among the ruins of Greece, than converse with the monks of Palestine in their gloomy retreats.

The result of Byron's travels was seen in the first two cantos of "Childe Harold," showing alike the fertility of his mind and the aspirations of a lofty genius. These were published in 1812, soon after his return to England, at the age of twenty-four. They took England by storm, creating both surprise and admiration. Public curiosity and enthusiasm for the young poet, who had mounted to the front ranks

of literature at a single leap, was unbounded and universal. As he himself wrote: "I awoke one morning and found myself famous."

Young Byron was now sought, courted, and adored, especially by ladies of the highest rank. Everybody was desirous to catch even a glimpse of the greatest poet that had appeared since Pope and Dryden; any palace or drawing-room he desired to enter was open to him. He was surfeited with roses and praises and incense. He alone took precedence over Scott and Coleridge and Moore and Campbell. For a time his pre-eminence in literature was generally conceded. He was the foremost man of letters of his day, and the greatest popular idol. His rank added to his *éclat*, since not many noblemen were distinguished for genius or literary excellence. His singular beauty of face and person, despite his slight lameness, attracted the admiring gaze of women. What Abélard was in the schools of philosophy, Byron was in the drawing-rooms of London. People forgot his antecedents, so far as they were known, in the intoxication of universal admiration and unbounded worship of genius. No poet in English history was ever seated on a prouder throne, and no heathen deity was ever more indifferent than he to the incense of idolaters.

Far be it from me to attempt an analysis of the merits of the poem with which the fame of Byron

will be forever identified. Its great merits are universally conceded; and while it has defects, — great inequalities in both style and matter; some stanzas supernal in beauty, and others only mediocre, — on the whole, the poem is extraordinary. Byron adopted the Spenserian measure, — perhaps the most difficult of all measures, hard even to read aloud, — in which blank verse seems to blend with rhyme. It might be either to the ear, though to the eye it is elaborate rhyme, — such as would severely task a made poet, but which this born poet seems to have thrown off without labor. The leading peculiarity of the poem is description, — of men and places: of the sea, the mountain, and the river; of Nature in her loveliness and mysteries; of cities and battle-fields consecrated by the heroism of brave and gifted men, in Greece, in Rome, in mediæval Europe, — with swift passing glances at salient points in history, showing extensive reading and deep meditation.

As to the spirit of "Childe Harold," it is not satirical; it is more pensive than bitter, and reveals the loneliness and sorrows of an unsatisfied soul, — the unrest of a pilgrim in search for something new. It seeks to penetrate the secrets of struggling humanity, at war often with those certitudes which are the consolation of our inner life. It everywhere recognizes the soul as that which gives greatest dignity to man. It invokes love

as the noblest joy of life. The poem is one of the most ideal of human productions, soaring beyond what is material and transient. It is not religious, not reverential, not Christian, like the "Divine Comedy" and the "Paradise Lost;" and yet it is lofty, aspiring, exulting in what is greatest in deed or song, destined to immortality of fame and admiration. It is a confession, indirectly, of the follies and shortcomings of the author, and of their retribution, but complains not of the Nemesis that avenges everything. It is sensitive of wrongs and injustices and misrepresentations, but does not hurl anathemas, — speaking in sorrow rather than in anger, except in regard to hypocrisies and shams and lies, when its scorn is intense and terrible.

The whole poem is brilliant and original, but does not flash like fire in a dark night. It was written with the heart's blood, and is as earnest as it is penetrating. It does not ascend to the higher mysteries forever veiled from mortal eye, nor descend to the deepest depths of hatred and despair, but confines itself to those passions which have marked gifted mortals, and those questionings in which all thoughtful minds have ever delighted. It does not make revelations like "Hamlet" or "Macbeth;" it does not explore secrets hidden forever from ordinary minds, like "Faust;" but it muses and meditates on what Fate and Time have brought to pass. — such events as have

been revealed in history. It invokes the neglected but impressive monuments of antiquity to tell the tales of glory and of shame. In moral wisdom it is vastly inferior to Shakspeare, and it is not rich in those wise and striking lines which pass into the proverbs of the world; but it has the glow of a poetic soul, longing for fame, craving love, and not unmindful of immortality. Its most beautiful stanzas are full of tenderness and sadness for lost or unrequited affections; of reproachless sorrow for broken friendships, in which the soul would fain have lived but for inconsistencies and contradictions which made true and permanent love impossible. The poem paints a paradise lost, rather than a paradise regained. I wonder at its popularity, for it seems to me too deep and learned for popular appreciation, except in those stanzas where pathos or enthusiasm, expressed in matchless language, appeal to the heart and soul.

Of all modern poets, Byron is the most human and outspoken, daring to say what many would fear or blush to meditate upon. He fearlessly reveals the infirmities and audacities of a double and mysterious nature, made up of dust and deity, now grovelling in the mire, then borne aloft to the skies, — the football of the eternal powers of good and evil, enslaved and yet to be emancipated, as we may hope, in the

last and final struggle, when the soul is rescued by Omnipotence.

I have alluded to the triumphs of Byron on the publication of "Childe Harold," — but his joys were more than balanced by his sorrows. His mother died suddenly without seeing him. His dearest friend Mathews was drowned. He was hampered by creditors. He made no mark in the House of Lords, and was sick of what he called "parliamentary mummeries." His habits became more and more dissipated among the boon companions who courted his society. His reputation after a while began to wane, for people became ashamed of their enthusiasm. Some critics disparaged his poetry, and conventional circles were shocked by his morals. Three years of London life told on his constitution, and he was completely disenchanted. He sought retirement and solitude, for not even the most brilliant society satisfied him. He wearied of such a woman and admirer as Madame de Staël. He went to Holland House — that resort of all the eminent ones of the time — as seldom as he could. He buried himself with a few intimate friends, chiefly poets, among whom were Moore and Rogers. He saw and liked Sir Walter Scott, but did not push his acquaintance to intimacy. The larger part of his letters were written to Murray, the publisher, who treated him generously; but Byron gave away his

literary gains to personal friends in need. He seemed to scorn copyrights for support. He would write only for fame.

At the age of twenty-seven, in January, 1815, Byron married Miss Milbanke, — a lady whom he did not love, but to whom he was attracted by her supposed wealth, which would patch up his own fortunes. He had great respect for this lady and some friendship; but with all her virtues and attainments she was cold, conventional, and exacting. A mystery shrouds this unfortunate affair, which has never been fully revealed. The upshot was that, to Byron's inexpressible humiliation, in less than a year she left him, never to return. No reasons were given. It was enough that both parties were unhappy, and had cause to be; and both kept silence.

But the voice of rumor and scandal was not silent. All the failings of Byron were now exaggerated and dwelt upon by those who envied him, and by those who hated him, — for his enemies were more numerous than his friends. Those whom he had snubbed or ridiculed or insulted now openly turned against him. The conventional public had a rare subject for their abuse or indignation. Proper people, religious people, and commonplace people, joined in the cry against a man with whom a virtuous woman could not live. Indeed, no woman could have lived

happily with Byron; and very few were the women with whom he could have lived happily, by reason of that irritability and unrest which is so common with genius. The habits of abstraction and contemplation which absorbed much of his time at home were not easily understood by an ordinary woman, to whom social life is necessary.

Byron lived much in his library, which was his solitary luxury. In the revelry of the imagination his heart became cold. "To follow poetry," says Pope, "one must leave father and mother, and cleave to it alone," — as Dante and Petrarch and Milton did. Not even Byron's intense craving for affection could be satisfied when he was dwelling on the ideals which his imagination created, and which scarcely friendship could satisfy. Even so good a man as Carlyle lived among his books rather than in the society of his wife, whom he really loved, and whose virtues and attainments he appreciated and admired. An affectionate woman runs a great risk in marrying an absorbed and preoccupied man of genius, even if his character be reproachless. Unfortunately, the character of Byron was anything but reproachless, and no one knew this better than his wife, which knowledge doubtless alienated what little affection she had for him. He seems to have sought low company even after his marriage, and Lady Byron

has intimated that she did not think him altogether sane. Living with him as his wife was insupportable; but though she separated from him, she did not seek a divorce.

Byron would not have married at all if he had consulted his happiness, and still more his fame. "In reviewing the great names of philosophy and science, we shall find that those who have most distinguished themselves have virtually admitted their own unfitness for the marriage tie by remaining in celibacy, — Newton, Gassendi, Galileo, Descartes, Bayle, Locke, Leibnitz, Boyle, Hume, Gibbon, Macaulay, and a host of others."

The scandal which Byron's separation from his wife created, and his known and open profligacy, at last shut him out from the society of which he had been so bright an ornament. It is a peculiarity of the English people, which redounds to their honor, to exclude from public approbation any man, however gifted or famous, who has outraged the moral sense by open and ill-disguised violation of the laws of morality. The cases of Dilke and Parnell in our own day are illustrations known to all. What in France or Italy is condoned, is never pardoned or forgotten in England. Not even a Voltaire, a Rousseau, or a Mirabeau, had they lived in England, could have been accepted by English society, — much less a man who

scorned and ridiculed it. Even Byron — for a few years the pet, the idol, and the glory of the country — was not too high to fall. To quote one of his own stanzas, —

> "He who ascends to mountain-tops shall find
> The loftiest peaks most wrapt in clouds and snow;
> He who surpasses or subdues mankind
> Must look down on the hate of those below.
> Though high above the sun of glory glow,
> And far beneath the earth and ocean spread,
> Round him are icy rocks, and loudly blow
> Contending tempests on his naked head."

Embarrassed in his circumstances; filled with disgust, mortification, and shame; excluded from the proudest circles, — Byron now resolved to leave England forever, and bury himself in such foreign lands as were most congenial to his tastes and habits. But for his immorality he might still have shined at an exalted height; for he had not yet written anything which shocked the practical English mind. The worst he had written was bitter satire, yet not more bitter than that of Swift or Pope. No defiance, no blasphemous sentiments, or what seemed to many to be such, had yet escaped him. His "Corsair" and his "Bride of Abydos" appeared soon after the "Childe Harold," and added to his fame by their exquisite melody of rhyme and sentimental admiration for Oriental life — though even these were tinged with

that *abandon* which afterwards made his latter poems a scandal and reproach. "The disappointment of youthful passion, the lassitude and remorse of premature excess, the lone friendlessness of his life," and, I may add, the reproaches of society, induced him to fly from the scene of his brilliant successes, filled with blended sentiments of scorn, hatred, defiance, and despair.

In the Spring of 1816, at the age of twenty-eight, Byron left England forever, — a voluntary exile on the face of the earth, saddened, embittered, and disappointed. It was to Italy that he turned his steps, passing through Brussels and Flanders, lingering on the Rhine, enamored with its ruined castles, still more with Nature, and making a long stay in Switzerland. Here he visited the Castle of Chillon, all the spots made memorable by the abodes of Rousseau, Gibbon, and Madame de Staël, and all the most interesting scenery of the Bernese Alps, — Lake Leman, Interlaken, Thun, the Jungfrau, the glaciers, Brientz, Chamouni, Berne, and on to Geneva, where he made the acquaintance of Shelley and his wife. The Shelleys he found most congenial, and stayed with them some time. While in the neighborhood of Geneva he produced the third canto of "Childe Harold," "The Prisoner of Chillon," "A Dream," and other things. In October, he passed on to Milan, Verona,

and Venice; and in this latter city he took up his residence.

Oh that we could blot out Byron's life in Venice, made up of love adventures and dissipation and utter abandonment to those pleasures that appealed to his lower nature, as if he were possessed by a demon, utterly reckless of his health, his character, and his fame! Venice was then the most immoral city in Italy, given over to idleness and pleasure. It was here that Byron's contempt for woman became fixed, seeing only her weaknesses and follies; and it was this contempt of woman which intensified the abhorrence in which his character was generally held, in the most respectable circles in England. Even in distant Venice his baleful light was not under a bushel, and the scandals of his life extended far and wide, — especially that in reference to Margherita Cogni, an illiterate virago who could neither read nor write, and whom he was finally compelled to discard on account of the violence of her temper, after living with her in the most open manner.

And yet, in all this degradation, he was not idle. How could so prolific a writer be idle! Byron did not ordinarily rise till two o'clock in the afternoon, and spent the interval between his breakfast and dinner in riding on the Lido, — one of those long narrow islands which lie between the Adriatic and

the Lagoon, in the midst of which Venice is built, on the islets arising from its shallow waters. Yet he found time to begin his "Don Juan," besides writing the "Lament of Tasso," the tragedy of "Manfred," and an Armenian grammar, all which appeared in 1817; in 1818, "Beppo," and in 1819, "Mazeppa." He also made a flying trip to Florence and Rome, and some of the finest stanzas of "Childe Harold" are descriptions of the classic ruins and the masterpieces of Grecian and mediæval art, — the beauties and the associations of Italy's great cities.

"I stood in Venice on the Bridge of Sighs;
A palace and a prison on each hand:
I saw from out the wave her structures rise
As from the stroke of the enchanter's wand!
A thousand years their cloudy wings expand
Around me, and a dying glory smiles
O'er the far times, when many a subject land
Looked to the winged Lion's marble piles,
Where Venice sate in state, throned on her hundred isles!"

Byron's correspondence was small, being chiefly confined to his publisher, to Moore, and to a few intimate friends. These letters are interesting because of their frankness and wit, although they are not models of fine writing. Indeed, I do not know where to find any specimens of masterly prose in all his compositions. He was simply a poet, facile in every form of measure from Spenser to Campbell. No remarkable prose writings appeared in England at all at that

time, until Sir Walter Scott's novels were written, and until Macaulay, Carlyle, and Lamb wrote their inimitable essays. Nothing is more heavy and unartistic than Moore's "Life of Byron;" there is hardly a brilliant paragraph in it, — and yet Moore is one of the most musical and melodious of all the English poets. Milton, indeed, was equally great in prose and verse, but very few men have been distinguished as prose writers and poets at the same time. Sir Walter Scott and Southey are the most remarkable exceptions. I think that Macaulay could have been distinguished as a poet, if he had so pleased; but he would have been a literary poet like Wordsworth or Tennyson or Coleridge, — not a man who sings out of his soul because he cannot help it, like Byron or Burns, or like Whittier among our American poets.

It was not until 1819, when Byron had been three years in Venice, that he fell in love with the Countess Guiccioli, the wife of one of the richest nobles of Italy, — young, beautiful, and interesting. This love seems to have been disinterested and lasting; and while it was a violation of all the rules of morality, and would not have been allowed in any other country than Italy, it did not further degrade him. It was pretty much such a love as Voltaire had for Madame de Châtelet; and with it he was at last content. There is no evidence that Byron ever after-

ward loved any other woman; and what is very singular about the affair is that it was condoned by the husband, until it became a scandal even in Italy.

The countess was taken ill on her way to Ravenna, and thither Byron followed her, and lived in the same palace with her, — the palace of her husband, who courted the poet's society, and who afterward left his young countess to free intercourse with Byron at Bologna, — not without a compensation in revenue, which was more disgraceful than the amour itself. About this time Byron would probably have returned to England but for the enchantment which enslaved him. He could not part from the countess, nor she from him.

The Pope pronounced the separation of the count from his wife, and she returned to her father's house on a pittance of £200 a year. She sacrificed everything for the young English poet, — her splendid home, her relatives, her honor, and her pride. Never was there a sadder episode in the life of a man of letters. If Byron had married such a woman in his early life, how different might have been his history! With such a love as she inspired, had he been faithful to it, he might have lived in radiant happiness, the idol and the pride of all admirers of genius wherever the English language is spoken.

seated on a throne which kings might envy. So much have circumstances to do with human destinies! Since Abélard, never was there a man more capable of a genuine fervid love than Byron; and yet he threw himself away. He was his own worst enemy, and all from an ill-regulated nature which he inherited both from his father and his mother, with no Mentor to whom he would listen. And thus his star sunk down in the eternal shades, — a fallen Lucifer expelled from bliss.

I would not condone the waywardness and vices of Byron, or weaken the eternal distinctions between right and wrong. The impression I wish to convey is that there were two very distinctly marked sides to his character; that his conduct was not without palliations, in view of his surroundings, the force of his temptations, and his wayward nature, uncurbed by parental care or early training, indeed rather goaded on by the unfortunate conditions of his youth to find consolation in doing as he liked, without regard to duty or the opinions of society. Born with the keenest sensibilities, with emotive powers of tremendous sweep and force; neglected, crossed, mortified, with no wise guidance, — he was driven in upon himself, and developed an intense self-will, which would endure no control. Unhappy will be the future of that man, however amiable, affectionate, and generous, who, whether from

neglect in youth, like Byron, or from sheer wilfulness in manhood, determines to act as the mood takes him, because he has freedom of will, without regard to the social restraints imposed upon conscience by the unwritten law, which pursues him wherever he goes, even should he fly to the uttermost parts of the earth. No one can escape from moral accountability, whether in a seductive paradise, or in a dungeon, or in a desert. The only stability for society must be in the character of its individual members. Before pleasure comes duty, — to family, to friends, to country, to self, and to the Maker.

This sense of moral accountability Byron seems never to have had, in regard to anybody or anything, his self-indulgence culminating in an egotism melancholy to behold. He would go where he pleased, say what he pleased, write as he pleased, do what he pleased, without any constraint, whether in opposition or not to the customs and rules of society, his own welfare, or the laws of God. It was moral madness pursuing him to destruction, — the logical and necessary sequence of unrestrained self-will, sometimes assuming the form of angelic loveliness and inspiration in the eyes of his idolaters. No counsellor guided him wiser than Moore or Shelley. Even the worldly advice of Rogers and Madame de Staël was thrown away, whenever they presumed to counsel him. No-

body could influence him. His abandonment to fitful labors or pleasures was alike his glory and his shame. After a day of frivolity he would consume the midnight hours in the intensest studies, stimulated by gin, to awake in the morning in lassitude or pain, — for work he must, as well as play. The consequence of this burning the candle at both ends was failing health and diminished energies, until his short race was run. He had produced more poetry at thirty-four years of age than any other English poet at the age of fifty, — some of almost transcendent merit, but more of questionable worth, though not of questionable power. Aside from the "Childe Harold," the "Hebrew Melodies," the "Prisoner of Chillon," and perhaps the "Corsair," the "Bride of Abydos," "Lara," and the "Siege of Corinth," the rest, excepting minor poems, however beautiful in measure and grand in thought, give a shock to the religious or to the moral sentiments. "Cain" and "Manfred" are regarded as almost blasphemous, though probably not so meant to be by the poet, in view of the stirring questions of Grecian tragedy; while the longest of his poems, "Don Juan," is an insult to womanhood and a disgrace to genius; for although containing some of the most exquisite touches of description and finest flights of poetic feeling, its theme is along the lowest level of human passion.

Whatever Byron wrote was unhesitatingly published and read, whether good or evil, whatever were those follies and defiances which excluded him from the best society; and it is a matter of surprise to me that any noted and wealthy publisher could be found, in respectable and conventional England, venal enough to publish perhaps the most corrupting poem in our language, — worse than anything which Boccaccio wrote for his Italian readers, or anything which plain-spoken Fielding and the dramatists of the reign of Charles II. ever allowed to go into print; for though they were coarser in their language, they were not so seductive in their spirit, and did not poison the soul like "Don Juan," the very name of which has become a synonym for extreme depravity. That abominable poem was read because Lord Byron wrote it, and because its immorality was slightly veiled by the beauty of the language, even when a copy could not be found on the table of any respectable drawing-room, and the name of the author was seldom mentioned except with stern and honest censure. It is perhaps fair to quote Murray's own words, throwing the responsibility on the public: "They talked of his immoral writings; but there is a whole row of sermons glued to my shelf. I hate the sight of them. Why don't they buy those?" A fair enough retort; and yet, like the newspaper purveyors of the records of

vice in our own day, the publisher was responsible for making the vile stuff accessible, and thus debasing the public taste.

How different was Byron's painting of Spanish life from that of the immortal Cervantes, whom Lowell places among the five master geniuses of the world! In "Don Quixote" there is not a sentence which does not exalt woman, or which degrades man. A lofty ideal of purity and chivalrous honor permeates every page, even in the most ludicrous scenes. The whole work blazes with wit, and with the wisdom of a proverbial philosophy, uttered by the ignorant squire of a fanatical and bewildered knight; but amidst the practical jokes and follies of all the characters in that marvellous work of fiction, we see also a moral beauty, idealized of course, such as was rivalled only in Spanish art in the Madonnas of Murillo. I believe that in the imaginary sketches of Spanish life as portrayed by Byron, slanders and lies deface the poem from beginning to end. Who is the best authority for truthfulness in the description of Spanish people, Cervantes or Byron? The spiritual loftiness portrayed in the lives of Spanish heroes and heroines, mixed up as it was with the most ludicrous pictures of common life, has made the Spaniard's work of fiction one of the most treasured and enduring monuments of human fame; whereas the insulting innuendoes of the English poet

have gone far to rob him of the glory which he had justly won in his earlier productions, and to make his name a doubt. If, in the course of generations yet to come, the evil which Byron did by that one poem alone shall be forgotten in the services he rendered to our literature by other works, which cannot die, then he may some day be received into the Pantheon of the benefactors of mind.

I would speak with less vehemence in reference to those poems which are generally supposed to be permeated with defiance, scorn, and misanthropy. In "Manfred" and "Cain," it was with Byron a work of art to describe the utterances of impious spirits against the sovereign rule of God. Had he not fallen from high estate as an interpreter of the soul, the critics might have seen here nothing more to condemn than in some of the Grecian tragedies, many passages in the "Paradise Lost," and in the general spirit of "Faust." It is no proof that he was a blasphemer in his heart because he painted blasphemy. To describe a wanderer on the face of the earth, driven hither and thither by pursuing vengeance as the first recorded murderer, the poet was obliged by all the rules of art to put such sentiments into his mouth as accorded with his unrepented crime and his dreadful agonies of mind and soul. Where is the proof that they were *his own* agonies, remorse, despair? Surely, we may pardon

in Byron what we excuse in Goethe in the delineation of unique characters, — the great creations which belong to the realm of the imagination alone. The imputation that the sayings of his fallen fiends were the cherished sentiments of the poet himself, may have been one cause of his contempt for the average intelligence of his countrymen, and for their inveterate and incurable prejudices. Nothing in Dante is more intense and concentrated in language than the malediction of Eve upon her fratricidal son: —

> "May the grass wither from thy feet! the woods
> Deny thee shelter! earth a home! the dust
> A grave! the Sun his light! and Heaven her God!"

Yet the reader feels the naturalness of this bitter cursing of her own son by the frenzied mother. How could a great artist like Byron put sentiments into the mouth of Cain such as would be harmless in the essays of a country parson? If he painted Lucifer, he must make him speak like Lucifer, not like a theological professor. Nothing could be more ungenerous and narrow than to abuse Byron for a dramatic poem in which some of his characters were fiends rather than men. We have no more right to say that he was an infidel because Cain or Lucifer blasphemed, than to say that Goethe was an atheist because Mephistopheles denied God.

If Byron had avowed atheistical opinions in letters or conversations, that would be another thing; but there is no evidence that he did, and much to the contrary. A few months before he died he was visited by a pious crank, who out of curiosity or Christian zeal sought to know his theological views. Byron treated him with the greatest courtesy, and freely communicated his opinions on religious subjects, — from which it would appear that he differed from church people generally only on the matter of eternal punishment, which he did not believe was consistent with infinite love or infinite justice. Perhaps it would have been wiser if he had not written "Cain" at all, considering how many readers there are without brains, and how large was the class predisposed to judge him harshly in everything. No doubt he was irreligious and sceptical, but it does not follow from this that he was atheistical or blasphemous.

There is doubtless a misanthropic vein in all Byron's later poetry which is not wholesome for many people to read, — especially in "Manfred," one of the bitterest of his productions by reason of sorrows and disappointments and misrepresentations. It was Byron's misfortune to appear worse than he really was, owing to his unconcealed contempt for the opinions of mankind. Yet he could not complain that he reaped what he had not sown. Some of his biographers thought him

to be at this time even morbidly desirous of a bad reputation, — going so far as to write paragraphs against himself in foreign journals, and being filled with glee at the joke, when they were republished in English newspapers. He despised and defied all conventionalities, and conventional England dropped him from her list of favorites.

The life of Byron, strange to say, was less exposed to scandal after he made the acquaintance of the countess who enslaved him, and who was also enslaved in turn. His heart now opened to many noble sentiments. He returned, in a degree, to society, and gave dinners and suppers. He associated with many distinguished patriots and men of genius. He had a strong sympathy with the Italians in their struggle for freedom. One quarter of his income he devoted to charities. He was regular in his athletic exercises, and could swim four hours at a time; he was always proud of swimming across the Hellespont. He was devoted to his natural daughter, and educated her in a Catholic school. He studied more severely all works of art, though his admiration for art was never so great as it was for Nature. The glories and wonders of Nature inspired him with perpetual joys. There is nothing finer in all his poetry than the following stanza: —

> "Ye stars! which are the poetry of Heaven,
> If in your bright leaves we would read the fate

Of men and empires, — 't is to be forgiven
That in our aspirations to be great
Our destinies o'erleap their mortal state,
And claim a kindred with you; for ye are
A beauty and a mystery, and create
In us such love and reverence from afar,
That fortune, fame, power, life, have named themselves a star."

There never was a time when Byron did not seek out beautiful retreats in Nature as the source of his highest happiness. Hence, solitude was nothing to him when he could commune with the works of God. His biographer declares that in 1821 "he was greatly improved in every respect, — in genius, in temper, in moral views, in health and happiness. He has had mischievous passions, but these he seems to have subdued." He was always temperate in his diet, living chiefly on fish and vegetables; and if he drank more wine and spirits than was good for him, it was to rally his exhausted energies. His powers of production were never greater than at this period, but his literary labors were slowly wearing him out. He could not live without work, while pleasure palled upon him. In a letter to a stranger who sought to convert him, he showed anything but anger or contempt. "Do me," says he, "the justice to suppose, that *Video meliora proboque*, however the *deteriora sequor* may have been applied to my conduct." Writing to Murray in 1822, he says: "It is not impossible that I may

have three or four cantos of 'Don Juan' ready by autumn, as I obtained a permission from my dictatress [the Countess Guiccioli] to continue it, — provided always it was to be more guarded and decorous in the continuation than in the commencement." Alas, he could not undo the mischief he had done!

About this time Byron received a visit from Lord Clare, his earliest friend at Cambridge, to whom through life he was devotedly attached, — a friendship which afforded exceeding delight. He never forgot his few friends, although he railed at his enemies. He was ungenerously treated by Leigh Hunt, to whom he rendered every kindness. He says, —

"I have done all I could for him since he came here [Genoa], but it is all most useless. His wife is ill, his six children far from tractable, and in worldly affairs he himself is a child. The death of Shelley left them totally aground; and I could not see them in such a state without using the common feelings of humanity, and what means were in my power, to set them afloat again. . . . As to any community of feeling, thought, or opinion between him and me there is little or none; but I think him a good-principled man, and must do as I would be done by."

Toward Shelley, Byron entertained the greatest respect and affection for his suavity, gentleness, and good breeding; and Shelley's accidental death was a

great shock to him. Among his other intimate acquaintances in Italy were Lord and Lady Blessington, with whom he kept up a pleasant correspondence. The most plaintive, sad, and generous of all his letters was the one he wrote to Lady Byron from Pisa, in 1821, in acknowledgment of the receipt of a tress of his daughter Ada's hair: —

"The time which has elapsed since our separation has been considerably more than the whole brief period of our union and of our prior acquaintance. We both made a bitter mistake; but now it is over, and irrecoverably so. . . . But this very impossibility of reunion seems to me at least a reason why on all the few points of discussion which can arise between us, we should preserve the courtesies of life, and as much of its kindness as people who are never to meet may preserve more easily than nearer connections. . . . I assure you I bear you now no resentment whatever. Whether the offence has been solely on my side, or reciprocal, or on yours chiefly, I have ceased to reflect upon any but two things, — that you are the mother of my child, and that we shall never meet again."

At this period, about a year before Byron's death, Moore thus writes: —

"To the world, and more especially England, he presented himself in no other aspect than that of a stern, haughty misanthrope, self-banished from the society of men, and most of all from that of English-

men. The more beautiful and genial inspirations of his muse were looked upon but as lucid intervals between the paroxysms of an inherent malignancy of nature. But how totally all this differed from the Byron of the social hour, they who lived in familiar intercourse with him may be safely left to tell. As it was, no English gentleman ever approached him with the common forms of introduction, that did not come away at once surprised and charmed by the kind courtesy of his manners, the unpretending play of his conversation, and on nearer intercourse the frank, youthful spirits, to the flow of which he gave way with such zest as to produce the impression that gaiety was after all the true bent of his disposition."

Scott, writing of him after his death, says, —

"In talents he was unequalled; and his faults were those rather of a bizarre temper, arising from an eager and irritable nervous habit, than any depravity of disposition. He was devoid of selfishness, which I take to be the basest ingredient in the human composition. He was generous, humane, and noble-minded, when passion did not blind him."

About this time, 1823, the great struggle of the Greeks to shake off the Ottoman yoke was in progress. I have already in another volume[1] attempted to give the facts in relation to that memorable movement. Christendom sympathized with the gallant

[1] Beacon Lights of History (Vol. IX.)

but apparently hopeless struggle of a weak nation to secure its independence, both from a sentiment of admiration for the freedom of ancient Greece in the period of its highest glories, and from the love of liberty which animated the liberal classes amid the political convulsions of the day. But the governments of Europe were loath to complicate the difficulties which existed between nations in that stormy period, and dared not extend any open aid to struggling Greece, beyond giving their moral aid to the Greek cause, lest it should embroil Europe in war, of which she was weary. Less than ten years had elapsed since Europe had combined to dethrone Napoleon, and some of her leading powers, like Austria and Russia, had a detestation of popular insurrections.

In this complicated state of political affairs, when any indiscretion on the part of friendly governments might kindle anew the flames of war, Lord Byron was living in Genoa, taking such an interest in the Greek struggle that he abandoned poetry for politics. He had always sympathized with enslaved nations struggling for independence, and was driven from Ravenna on account of his alliance with the revolutionary Society of the Carbonari. A new passion now seized him. He entered heart and soul into the struggles of the Greeks. Their cause absorbed him. He would aid them to the full extent of his means,

with money and arms, as a private individual. He would be a political or military hero, — a man of action, not of literary leisure.

Every lover of liberty must respect Byron's noble aspirations to assist the Greeks. It was a new field for him, but one in which he might retrieve his reputation, — for it must be borne in mind that his ruling passion was fame, and that he had gained all he could expect by his literary productions. Whether loved or hated, admired or censured, his poetry had placed him in the front rank of literary geniuses throughout the world. As a poet his immortality was secured. In literary efforts he had also probably exhausted himself; he could write nothing more which would add to his fame, unless he took a long rest and recreation. He was wearied of making poetry; but by plunging into a sea of fresh adventures, and by giving a new direction to his powers, he might be sufficiently renovated, in the course of time, to write something grander and nobler than even "Childe Harold" or "Cain."

Lord Byron at this time was only thirty-five years old, a period when most men begin their best work. His constitution, it is true, was impaired, but he was still full of life and enterprise. He could ride or swim as well as he ever could. The call of a gallant people summoned him to arms, and of all

nations he most loved the Greeks. He was an enthusiast in their cause; he believed that the day of their deliverance was at hand. So he made up his mind to consecrate his remaining energies to effect their independence. He opened a correspondence with the Greek committee in London. He selected a party, including a physician, to sail with him from Geneva. He raised a sum of about £10,000, and on the 13th of July, 1823, embarked with his small party and eight servants, on board the "Hercules" for Greece.

After a short delay at Leghorn the poet reached Cephalonia on the 24th of July. He was enthusiastically received by the Greeks of Argostoli, the principal port, but deemed it prudent to remain there until he could get further intelligence from Corfu and Missolonghi,—visiting, in the interval, some of the neighboring islands consecrated by the muse of Homer.

The dissensions among the Greek leaders greatly embarrassed Byron, but did not destroy his ardor. He saw that the people were degenerate, faithless, and stained with atrocities as disgraceful as those of the Turks themselves. He dared not commit himself to any one of the struggling, envious parties which rallied round their respective chieftains. He lingered for six weeks in Cephalonia without the ordinary comforts of life, yet, against all his habits,

rising at an early hour and attending to business, negotiating bills, and corresponding with the government, so far as there was a recognized central power.

At last, after the fall of Corinth, taken from the Turks, and the arrival at Missolonghi of Prince Mavrocordato, the only leader of the Greeks worthy of the name of statesman, Byron sailed for that city, then invested by a Turkish fleet, and narrowly escaped capture. Here he did all he could to produce union among the chieftains, and took into his pay five hundred Suliotes, acting as their leader. He meditated an attack on Lepanto, which commanded the navigation of the Gulf of Corinth, and received from the government a commission for that enterprise but dissensions among his men, and intrigues between rival generals, prevented the execution of his project.

It was in Missolonghi, Jan. 22, 1824, that, with the memorandum, "On this day I completed my thirty-sixth year," Byron wrote his latest verses most pathetically regretting his youth and his unfortunate life, but arousing himself to find in a noble cause a glorious death: —

> "The fire that in my bosom preys
> Is like to some volcanic isle;
> No torch is kindled at its blaze, —
> A funeral pile.
>
> . . . . . .

"Awake! — not Greece: she is awake! —
Awake, my spirit! think through whom
Thy life-blood tastes its parent lake,
And then strike home!

. . . . . .

"Seek out — less often sought than found —
A soldier's grave, for thee the best;
Then look around, and choose thy ground,
And take thy rest!"

Vexations, disappointments, and exposure to the rains of February so wrought upon Byron's eager spirit and weakened body that he was attacked by convulsive fits. The physicians, in accordance with the custom of that time, bled their patient several times, against the protest of Byron himself, which reduced him to extreme weakness. He rallied from the attack for a time, and devoted himself to the affairs of Greece, hoping for the restoration of his health when spring should come. He spent in three months thirty thousand dollars for the cause into which he had so cordially entered. In April he took another cold from severe exposure, and fever set in, — to relieve which bleeding was again resorted to, and often repeated. He was now confined to his room, which he never afterwards left. He at last realized that he was dying, and sent incoherent messages to his sister, to his daughter, and to a few intimate friends. The end came on the 19th of April. The Greek govern-

ment rendered all the honor possible to the illustrious dead. His remains were transferred to England. He was not buried in Westminster Abbey, however, but in the church of Hucknal, near Newstead, where a tablet was erected to his memory by his sister, the Hon. Augusta Maria Leigh.

> "So Harold ends in Greece, his pilgrimage
> There fitly ending, — in that land renowned,
> Whose mighty genius lives in Glory's page,
> He on the Muses' consecrated ground
> Sinking to rest, while his young brows are bound
> With their unfading wreath! To bands of mirth
> No more in Tempe let the pipe resound!
> Harold, I follow to thy place of birth
> The slow hearse, — and thy last sad pilgrimage on earth."

I can add but little to what I have already said in reference to Byron, either as to his character or his poetry. The Edinburgh Review, which in Brougham's article on his early poems had stung him into satire and aroused him to a sense of his own powers, in later years by Jeffrey's hand gave a most appreciative account of his poems, while mourning over his morbid gloom: "'Words that breathe and thoughts that burn' are not merely the ornaments but the common staple of his poetry; and he is not inspired or impressive only in some happy passages, but through the whole body and tissue of his composition." The keen insight and excep-

tional intellect of the philosopher-poet Goethe recognized in him "the greatest talent of our century." His marvellous poetic genius was universally acknowledged in his own day; and more than that, so human was it that it attracted the sympathies of all civilized nations, and, as Lamartine said, "made English literature known throughout Europe." Byron's poetry was politically influential also, by reason of its liberty-loving spirit, — arousing Italy, inspiring the young revolutionists of Germany, and awaking a generous sympathy for Greece. Without the consciousness of any "mission" beyond the expression of his own ebullient nature, this poet contributed no mean impulse to the general emancipation of spirit which has signalized the nineteenth century.

Two generations have passed away since Byron's mortal remains were committed to the dust, and the verdict of his country has not since materially changed, — admiration for his genius *alone*. The light of lesser stars than he shines with brighter radiance. What the enlightened verdict of mankind may be two generations hence, no living mortal can tell. The worshippers of intellect may attempt to reverse or modify the judgment already passed; but the impressive truth remains that no man, however great his genius, will be permanently judged aside from character. When Lord Bacon left his name and

memory to men's charitable judgments and the next age, he probably had in view his invaluable legacy to mankind of earnest searchings after truth, which made him one of the greatest of human benefactors. How far the poetry of Byron has proved a blessing to the world must be left to an abler critic than I lay claim to be. In him the good and evil went hand in hand in the eternal warfare which ancient Persian sages saw between the powers of light and darkness in every human soul, — a consciousness of which warfare made Byron himself in his saddest hours wish he had never lived at all.

If we could, in his life and in his works, separate the evil from the good, and let only the good remain, — then his services to literature could hardly be exaggerated, and he would be honored as the greatest English poet, so far as native genius goes, after Shakespeare and Milton.

THOMAS CARLYLE.

1795–1881.

CRITICISM AND BIOGRAPHY.

THOMAS CARLYLE.

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THE now famous biography of Thomas Carlyle, by Mr. Froude, shed a new light on the eccentric Scotch essayist, and in some respects changed the impressions produced by his own "Reminiscences" and the Letters of his wife. It is with the aid of those two brilliant and interesting volumes on Carlyle's "Earlier Life" and "Life in London," issued about two years after the death of their distinguished subject, that I have rewritten my own view of one of the most remarkable men of the nineteenth century.

Of the men of genius who have produced a great effect on their own time, there is no one concerning whom such fluctuating opinions have prevailed within forty years as in regard to Carlyle. His old admirers became his detractors, and those who first disliked him became his friends. When his earlier works appeared they attracted but little general notice,

though there were many who saw in him a new light, or a new power to brush away cobwebs and shams, and to exalt the spiritual and eternal in man over all materialistic theories and worldly conventionalities.

Carlyle's "Miscellanies" — essays published first in the leading Reviews, when he lived in his moorland retreat — created enthusiasm among young students and genuine thinkers of every creed. Lord Jeffrey detected the new genius and gave him a lift. Carlyle's "French Revolution" took the world by surprise, and established his fame. His "Oliver Cromwell" modified and perhaps changed the opinions of English and American people respecting the Great Protector. It was then that his popularity was greatest, and that the eccentric genius of Cheyne Row, so long struggling with poverty, was assured of a competence, and was received in some of the proudest families of the kingdom as a teacher and a sage. Thus far he was an optimist, taking cheerful views of human life, and encouraging those who had noble aspirations.

But for some unaccountable reason, whether from discontent or dyspepsia or disappointment, or disgust with this world, Carlyle gradually became a pessimist, and attacked all forms of philanthropy, thus alienating those who had been his warmest supporters. He grew more bitter and morose, until

at last he howled almost like a madman, and was steeped in cynicism and gloom. He put forth the doctrine that might was right, and that thrones belong to the strongest. He saw no reliance in governments save upon physical force, and expressed the most boundless contempt for all institutions established by the people. Then he wrote his "Frederic the Great," — his most ambitious and elaborate production, received as an authority from its marvellous historical accuracy, but not so generally read as his "French Revolution," and not, like his "Cromwell," changing the opinions of mankind.

Soon after this the death of his wife plunged him into renewed gloom, from which he never emerged; and he virtually retired from the world, and was lost sight of by the younger generation, until his "Reminiscences" appeared, injudiciously published at his request by his friend and pupil Froude, in which his scorn and contempt for everybody and everything turned the current of public opinion strongly against him. This was still further increased when the Letters of his wife appeared.

Carlyle's bitterest assailants were now agnostics of every shade and degree, especially of the humanitarian school, — that to which Mill and George Eliot belonged. It was seen that this reviler of hypocrisy and shams, this disbeliever in miracles and in mech-

anisms to save society, was after all a believer in God Almighty and in immortality; a stern advocate of justice and duty, appealing to the conscience of mankind; a man who detested Comte the positivist as much as he despised Mill the agnostic, and who exalted the old religion of his fathers, stripped of supernaturalism, as the only hope of the world. The biography by Froude, while it does not conceal the atrabilious temperament of Carlyle, his bad temper, his intense egotism, his irritability, his overweening pride, his scorn, his profound loneliness and sorrow, and the deep gloom into which he finally settled, made clear at the same time his honest and tender nature, his noble independence, his heroic struggles with poverty of which he never complained, his generous charities, his conscientiousness and allegiance to duty, his constant labors amid disease and excessive nervousness, and his profound and unvarying love for his wife, although he was deficient in those small attentions and demonstrations of affection which are so much prized by women. If it be asked whether he was happy in his domestic relations, I would say that he was as much so as such a man could be. But it was a physical and moral impossibility that with his ailments and temper he *could* be happy. He was not sent into this world to be happy, but to do a work which only such a man as he could do.

So displeasing, however, were the personal peculiarities of Carlyle that the man can never be popular This hyperborean literary giant, speaking a Babylonian dialect, smiting remorselessly all pretenders and quacks, and even honest fools, was himself personally a bundle of contradictions, fierce and sad by turns. He was a compound of Diogenes, Jeremiah, and Dr. Johnson: like the Grecian cynic in his contempt and scorn, like the Jewish prophet in his melancholy lamentations, like the English moralist in his grim humor and overbearing dogmatism.

It is unfortunate that we know so much of the man. Better would it be for his fame if we knew nothing at all of his habits and peculiarities. In our blended admiration and contempt, our minds are diverted from the lasting literary legacy he has left, which, after all, is the chief thing that concerns us. The mortal man is dead, but his works live. The biography of a great man is interesting, but his thoughts go coursing round the world, penetrating even the distant ages, modifying systems and institutions. What a mighty power is law! Yet how little do we know or care, comparatively, for lawgivers!

Thomas Carlyle was born in the year 1795, of humble parentage, in an obscure Scotch village. His father was a stone-mason, much respected for doing

good work, and for his virtue and intelligence, — a rough, rugged man who appreciated the value of education. Although kind-hearted and religious, it would seem that he was as hard and undemonstrative as an old-fashioned Puritan farmer, — one of those men who never kiss their children, or even their wives, before people. His mother also was sagacious and religious, and marked by great individuality of character. For these stern parents Carlyle ever cherished the profoundest respect and affection, regularly visiting them once a year wherever he might be, writing to them frequently, and yielding as much to their influence as to that of anybody.

At the age of fourteen the boy was sent to the University of Edinburgh, with but little money in his pocket, and forced to practise the most rigid economy. He did not make a distinguished mark at college, nor did he cultivate many friendships. He was reserved, shy, awkward, and proud. After leaving college he became a school-teacher, with no aptness and much disdain for his calling. It was then that he formed the acquaintance of Edward Irving, which ripened into the warmest friendship of his life. He was much indebted to this celebrated preacher for the intellectual impulse received from him. Irving was at the head of a school at Kirkcaldy, and Carlyle became his assistant. Both these young men were

ambitious, and aspired to pre-eminence. Like Napoleon at the military school of Brienne, they would not have been contented with anything less, because they were conscious of their gifts; and both attained their end. Irving became the greatest preacher of his day, and Carlyle the greatest writer; but Carlyle had the most self-sustained greatness. Irving was led by the demon of popularity into extravagances of utterance which destroyed his influence. Carlyle, on the other hand, never courted popularity; but becoming bitter and cynical in the rugged road he climbed to fame, he too lost many of his admirers.

In ceasing to be a country schoolmaster, Carlyle did not abandon teaching. He removed to Edinburgh for the study of divinity, and supported himself by giving lessons. He had been destined by his parents to be a minister of the Kirk of Scotland; but at the age of twenty-three he entered upon a severe self-examination to decide whether he honestly believed and could preach its doctrines. Weeks of intense struggle freed him from the intellectual bonds of the kirk, but fastened upon him the chronic disorder of his stomach which embittered his life, and in later years distorted his vision of the world about him. At the recommendation of his friend Irving, then preacher at Hatton Gardens, Carlyle now became private tutor to the son of Mr. Charles Buller,

an Anglo-Indian merchant, on a salary of £200; and the tutor had the satisfaction of seeing his pupil's political advancement as a member of the House of Commons and one of the most promising men in England.

About this time Carlyle, who had been industriously studying German and French, published a translation of Legendre's "Elements of Geometry;" and in 1824 brought out a "Life of Schiller," a work that he never thought much of, but which was a very respectable performance. In fact, he never thought much of any of his works: they were always behind his ideal. He wrote slowly, and took great pains to be accurate; and in this respect he reminds us of George Eliot. Carlyle had no faith in rapid writing of any sort, any more than Daniel Webster had in extempore speaking. After he had become a master of composition, it took him thirteen years of steady work to write "Frederick the Great," — about the same length of time it took Macaulay to write the history of fifteen years of England's life, whereas Gibbon wrote the whole of his voluminous and exhaustive "History of the Decline and Fall of the Roman Empire" in twenty years.

"Schiller" being finished, Carlyle was now launched upon his life-work as "a writer of books." He translated Goethe's "Wilhelm Meister," for which

he received £180. I do not see the transcendent excellence of this novel, except in its original and forcible criticism, and its undercurrent of philosophy; but it is nevertheless famous. These two works gave Carlyle some literary reputation among scholars, but not much fame.

Although Carlyle was thus fairly embarked on a literary career, the "trade" of literature he always regarded as a poor one, and never encouraged a young man to pursue it as a profession unless forced into it by his own irresistible impulses. Its nobility he ranked very high, but not its remunerativeness. He regarded it as a luxury for the rich and leisurely, but a very thorny and discouraging path for a poor man. How few have ever got a living by it, unless allied with other callings, — as a managing clerk, or professor, or lecturer, or editor! The finest productions of Emerson were originally delivered as lectures. Novelists and dramatists, I think, are the only class, who, without doing anything else, have earned a comfortable support by their writings. Historians have, with very few exceptions, been independent in their circumstances.

In the year 1826, at the age of thirty-one, Carlyle married Jane Welsh, the only child of a deceased physician of Haddington, who had some little property in expectancy from the profits of a farm in the moor-

lands of Scotland. She was beautiful, intellectual, and nervously intense. She had been a pupil of Edward Irving, who had introduced his friend Carlyle to her. On the whole, it was a fortunate marriage for Carlyle, although it would have been impossible for him to have or to give happiness in constant and intimate companionship with any woman. He was very fond of his wife, but in an undemonstrative sort of way, — except in his letters to her, which are genuine love-letters, tender and considerate. As in the case of most superior women, clouds at times gathered over her, which her husband did not or could not dissipate. But she was very proud of him, and faithful to him, and careful of his interest and fame. Nor is there evidence from her letters, or from the late biography which Froude has written, that she was, on the whole, unhappy. She was very frank, very sharp with her tongue, and sometimes did not spare her husband. She had a good deal to put up with from his irritable temper; but she also was irritable, nervous, and sickly, although in her loyalty she rarely complained, while she had many privations to endure, — for Carlyle until he was nearly fifty was a poor man. During the first two years of their residence in London they were obliged to live on £100 a year. He was never in even moderately easy circumstances until after his "Oliver Cromwell" was published.

After his marriage, Carlyle lived eighteen months near Edinburgh; but there was no opening for him in the exclusive society there. His merits were not then recognized as a man of genius in that cultivated capital, as it pre-eminently was at that time; but he made the acquaintance of Jeffrey, who acknowledged his merit, admired his wife, and continued to be as good a friend as that worldly but accomplished man could be to one so far beneath him in social rank.

The next seven years of Carlyle's life were spent at the Scotch moorland farm of Craigenputtock, belonging to his wife's mother, which must have contributed to his support. How any brilliant woman, fond of society as Mrs. Carlyle was, could have lived contentedly in that dreary solitude, fifteen miles from any visiting neighbor or town, is a mystery. She had been delicately reared, and the hard life wore upon her health. Yet it was here that the young couple established themselves, and here that some of the young author's best works were written, — as the "Miscellanies" and "Sartor Resartus." From here it was that he sent forth those magnificent articles on Heyne, Goethe, Novalis, Voltaire, Burns, and Johnson, which, published in the Edinburgh and other Reviews, attracted the attention of the reading world, and excited boundless admiration among students.

The earlier of these remarkable productions, like

those on Burns and Jean Paul Richter, were free from those eccentricities of style which Carlyle persisted in retaining with amazing pertinacity as he advanced in life, — except, again, in his letters to his wife, which are models of clear writing.

The essay on "German Literature" appeared in the same year, 1827, — a longer and more valuable article, a blended defence and eulogium of a *terra incognita*, somewhat similar in spirit to that of Madame de Staël's revelations twenty years before, and in which the writer shows great admiration of German poetry and criticism. Perhaps no Englishman, with the possible exceptions of Julius Hare and Coleridge, — the latter then a broken-down old man, — had at that time so profound an acquaintance as Carlyle with German literature, which was his food and life during the seven years' retirement on his moorland farm. This essay also was comparatively free from the involved, grotesque, but vivid style of his later works; and it was religious in its tone. "It is mournful," writes he, "to see so many noble, tender, and aspiring minds deserted of that light which once guided all such; mourning in the darkness because there is no home for the soul; or, what is worse, pitching tents among the ashes, and kindling weak, earthly lamps which we are to take for stars. But this darkness is very transitory. These ashes are the soil of future herbage and

richer harvests. Religion dwells in the soul of man, and is as eternal as the being of man."

In this extract we see the optimism which runs through Carlyle's earlier writings, — the faith in creation which is to succeed destruction, the immortal hopes which sustain the soul. He believed in the God of Abraham, and was as far from being a scoffer as the heavens are higher than the earth. He had renounced historical Christianity, but he adhered to its essential spirit.

The next article which Carlyle published seems to have been on Werner, followed the same year, 1828, by one on Goethe's "Helena," — a continuation of his "Faust." This transcendent work of German art, which should be studied rather than read, is commented on by the reviewer with boundless admiration. If there was one human being whom Carlyle worshipped it was the dictator of German literature, who reigned at Weimar as Voltaire had reigned at Ferney. If he was not the first to introduce the writings of Goethe into England, he was the great German's warmest admirer. If Goethe had faults, they were to Carlyle the faults of a god, and he exalted him as the greatest light of modern times, — a new force in the world, a new fire in the soul, who inaugurated a new era in literature which went to the heart of cultivated Europe, weary of the doubts and denials that Vol-

taire had made fashionable. It seemed to Carlyle that Goethe entered into the sorrows, the solemn questionings and affirmations of the soul, seeking emancipation from dogmas and denials alike, and, in the spirit of Plato, resting on the certitudes of a higher life, — calm, self-poised, many-sided, having subdued passion as he had outgrown cant; full of benignity, free from sarcasm; a man of mighty and deep experiences, with knowledge of himself, of the world, and the whole realm of literature; a great artist as well as a great genius, seated on the throne of letters, not to scatter thunderbolts, but to instruct the present and future generations.

The next great essay which Carlyle published, this time in the Edinburgh Review, was on Burns, — a hackneyed subject, yet treated with masterly ability. This article, in some respects his best, entirely free from mannerisms and affectation of style, is just in its criticism, glowing with eloquence, and full of sympathy with the infirmities of a great poet, showing a remarkable insight into what is noblest and truest. This essay is likely to live for style alone, aside from its various other merits. It is complete, exhaustive, brilliant, such as only a Scotchman could have written who was familiar with the laborious lives of the peasantry, living in the realm of art and truth, careless of outward circumstances and trappings, and exalting

only what is immortal and lofty. While Carlyle sees in Goethe the impersonation of human wisdom, — in every aspect a success, outwardly and inwardly, serene and potent as an Olympian deity, — he sees in Burns a highly gifted genius also, but yet a wreck and a failure; a man broken down by the force of that degrading habit which unfortunately and peculiarly and even mysteriously robs a man of all dignity, all honor, and all sense of shame. Amid the misfortunes, the mistakes, and the degradations of the born poet, whom he alike admires and pities and mildly blames, he sees also the noble elements of the poet's gifted soul, and loves him, especially for his sincerity, which next to labor he uniformly praises. It was the truthfulness he saw in Burns which constrained Carlyle's affection, — the poet's sympathy and humanity, speaking out of his heart in unconscious earnestness and plaintive melody; sad and sorrowful, of course, since his life was an unsuccessful battle with himself, but free from egotism, and full of a love which no misery could crush, — so unlike that other greatest poet of our century, "whose exemplar was Satan, the hero of his poetry and the model of his life." In this most beautiful and finished essay Carlyle paints the man in his true colors, — sinning and sinned against, courageous while yielding, poor but proud, scornful yet affectionate; singing in matchless lyrics the senti-

ments of the people from whom he sprung and among whom he died, which lyrics, though but fragments indeed, are precious and imperishable.

In the same year appeared the Life of Heyne, — the great German scholar, pushing his way from the depths of poverty and obscurity, by force of patient industry and genius, to a proud position and a national fame. "Let no unfriended son of genius despair," exclaims Carlyle. "If he have the will, the power will not be denied him. Like the acorn, carelessly cast abroad in the wilderness, yet it rises to be an oak; on the wild soil it nourishes itself; it defies the tempest, and lives for a thousand years." The whole outward life of Carlyle himself, like that of Heyne, was an example of heroism amid difficulties, and hope amid the storms.

The next noticeable article which Carlyle published was on Voltaire, and appeared in the Quarterly Review in 1829. It would appear that he hoped to find in this great oracle and guide of the eighteenth century something to admire and praise commensurate with his great fame. But vainly. Voltaire, though fortunate beyond example in literary history, versatile, laborious, brilliant in style, — poet, satirist, historian, and essayist, — seemed to Carlyle to be superficial, irreligious, and egotistical. The critic ascribes his power to ridicule, — a Lucian, who destroyed but did not

reconstruct; worldly, material, sceptical, defiant, utterly lacking that earnestness without which nothing permanently great can be effected. Carlyle says: —

"Voltaire read history, not with the eye of a devout seer, or even critic, but through a pair of mere anti-Catholic spectacles. It is not a mighty drama, enacted on the theatre of infinitude, with suns for lamps and eternity as a background, whose author is God and whose purport leads to the throne of God, but a poor, wearisome debating-club dispute, spun through ten centuries, between the Encyclopédie and the Sorbonne."

Carlyle's essays for the next two years, chiefly on German literature, which he admired and sought to introduce to his countrymen, were published in various Reviews. I can only allude to one on Richter, whose whimsicality of style he unconsciously copied, and whose original ideas he made his own. In this essay Carlyle introduced to the English people a great German, but a grotesque, whose writings will probably never be read much out of Germany, excellent as they are, on account of the "jarring combination of parentheses, dashes, hyphens, figures without limit, one tissue of metaphors and similes, interlaced with epigrammatic bursts and sardonic turns, — a heterogeneous, unparalleled imbroglio of perplexity and extravagance." There was another, on Schiller, not an idol to Carlyle as Goethe was, yet a great poet

and a true man, with deep insight and intense earnestness. "His works," said Carlyle, "and the memory of what he was, will arise afar off, like a towering landmark in the solitude of the past, when distance shall have dwarfed into invisibility many lesser people that once encompassed him, and hid them forever from the near beholder."

Thus far Carlyle had confined himself to biography and essays on German literature, in which his extraordinary insight is seen; but now he enters another field, and writes a strictly original essay, called "Characteristics," published in the Edinburgh Review in the prolific year of 1831, in which essay we see the germs of his philosophy. The article is hard to read, and is disfigured by obscurities which leave a doubt on the mind of the reader as to whether the author understood the subject about which he was writing, — for Carlyle was not a philosopher, but a painter and prose-poet. There is no stream of logic running consistently through his writings. In "Characteristics" he seems to have had merely glimpses of great truths which he could not clearly express, and which won him the reputation of being a German transcendentalist. Its leading idea is the commonplace one of the progress of society, which no sane and Christian man has ever seriously questioned. — not an uninterrupted progress, but a general

advance, brought about by Christian ideas. Any other view of progress is dreary and discouraging; nor is this inconsistent with great catastrophes and national backslidings, with the fall of empires, and French Revolutions.

We note at this time in Carlyle's writings, on the whole, a cheerful view of human life in spite of sorrows, hardships, and disappointments, which are made by Divine Providence to act as healthy discipline. We see nothing of the angry pessimism of his later writings. Those years at Craigenputtock were healthy and wholesome; he labored in hope, and had great intellectual and artistic enjoyment, which reconciled him to solitude, — the chief evil with which he had to contend, after dyspepsia. His habits were frugal, but poverty did not stare him in the face, since he had the income of the farm. It does not appear that the deep gloom which subsequently came over his soul oppressed him in his moorland retreat. He did not sympathize with any religion of denials, but felt that out of the jargon of false and pretentious philosophies would come at last a positive belief which would once more enthrone God in the world.

After writing another characteristic article, on Biography, he furnished for Fraser's Magazine one of the finest biographical portraits ever painted, — that of

Dr. Johnson, in which that cyclopean worker stands out, with even more distinctness than in Boswell's "Life," as one of the most honest, earnest, patient laborers in the whole field of literature. Carlyle makes us almost love this man, in spite of his awkwardness, dogmatism, and petulance. Johnson in his day was an acknowledged dictator on all literary questions, surrounded by admirers of the highest gifts, who did homage to his learning,—a man of more striking individuality than any other celebrity in England, and a man of intense religious convictions in an age of religious indifference. We now wonder why this struggling, poorly paid, and disagreeable man of letters should have had such an ascendency over men superior to himself in learning, genius, and culture, as Burke and Gibbon doubtless were. Even Goldsmith, whom he snubbed and loved, is now more popular than he. It was the heroism of his character which Carlyle so much admired and so vividly described,—contending with so many difficulties, yet surmounting them all by his persistent industry and noble aspirations; never losing faith in himself or his Maker, never servilely bowing down to rank and wealth, as others did, and maintaining his self-respect in whatever condition he was placed. In this delightful biography we are made to see the superiority of character to genius, and the dignity

of labor when idleness was the coveted desire of most fortunate men, as well as the almost universal vice of the magnates of the land. Labor, to the mind of Johnson as well as to that of Carlyle, is not only honorable, but is a necessity which Nature imposes as the condition of happiness and usefulness. Nor does Carlyle sneer at the wedded life of Johnson, made up of "drizzle and dry weather," but reverences his fidelity to his best friend, uninteresting as she was to the world, and his plaintive and touching grief when she passed away.

Carlyle in this essay exalts a life of letters, however poorly paid (which Pope in his "Dunciad" did so much to depreciate), showing how it contributes to the elevation of a nation, and to those lofty pleasures which no wealth can purchase. But it is the moral dignity of Johnson which the essay makes to shine most conspicuously in his character, supported as he was by the truths of religion, in which under all circumstances he proudly glories, and without which he must have made shipwreck of himself amid so many discouragements, maladies, and embarrassments, — for his greatest labors were made with poverty, distress, and obscurity for his companions, — until at last, victorious over every external evil and vile temptation, he emerged into the realm of peace and light, and became an oracle and a sage wherever he chose to go

Johnson was the greatest master of conversation in his day, whose detached sayings are still quoted more often than his most elaborate periods. I apprehend that there was a great contrast between Johnson's writings and his conversation. While the former are Ciceronian, his talk was epigrammatic, terse, and direct; and its charm and power were in his pointed and vehement Saxon style. Had he talked as he wrote, he would have been wearisome and pedantic. Still, like Coleridge and Robert Hall, he preached rather than conversed, thinking what he himself should say rather than paying attention to what others said, except to combat and rebuke them, — a discourser, as Macaulay was; not one to suggest interchange of ideas, as Addison did. But neither power of conversation nor learning would have made Johnson a literary dictator. His power was in the force of his character, his earnestness, and sincerity, even more than in his genius.

I will not dwell on the other Review articles which Carlyle wrote in his isolated retreat, since published as "Miscellanies," on which his fame in no small degree rests, — even as the essays of Macaulay may be read when his more elaborate History will lie neglected on the shelves of libraries. Carlyle put his soul into these miscellanies, and the labor and enjoyment of writing made him partially forget his

ailments. I look upon those years at Craigenputtock as the brightest and healthiest of his life, removed as he was from the sight of levities and follies which tormented his soul and irritated his temper.

Carlyle contrived to save about £200 from his literary earnings, so frugal was his life and so free from temptations. His recreation was in wandering on foot or horseback over the silent moors and unending hills, watered by nameless rills and shadowed by mists and vapors. His life was solitary, but not more so than that of Moses amid the deserts of Midian, — isolation, indeed, but in which the highest wisdom is matured. Into this retreat Emerson penetrated, a young man, with boundless enthusiasm for his teacher, — for Carlyle was a teacher to him as to hundreds of others in this country. Carlyle never had a truer and better friend than Emerson, who opened to him the great reward of recognition in distant America while yet his own land refused to take knowledge of him; and this friendship continued to the end, an honor to both, — for Carlyle never saw in Emerson's writings the genius and wisdom which his American friend admired in the Scottish sage. Nor were their opinions so harmonious as some suppose. Emerson despised Calvinism, and had no definite opinions on any theological subject; Carlyle was a Calvinist without the the-

ology of Calvinism, if that be possible. He did not, indeed, believe in historical Christianity, but he had the profoundest convictions of an overruling God, reigning in justice, and making the wrath of man to praise Him. Carlyle, too, despised everything visionary and indefinite, and had more respect for what is brought about by revolution than by evolution. But of all things he held in profoundest abhorrence the dreary theories of materialists and political economists. It was the spirit and not the body which stood out in his eyes as of most importance; it was the manly virtues which he reverenced in man, not his clothes and surroundings. And it was on this lofty spiritual plane that Carlyle and Emerson stood in complete harmony together.

I cannot quit this part of Carlyle's life without mention of what I conceive to be his most original and remarkable production, — "Sartor Resartus," — The Stitcher Restitched: or, The Tailor Done Over, — the title of an old Scotch song. It is a quaintly conceived reproduction of the work of an imaginary German professor on "The Philosophy of Clothes," — under which external figure he includes all institutions, customs, beliefs, in which humanity has draped itself, as distinguished from the inner reality of man himself. "The beginning of all Wisdom," he says, "is to look fixedly on Clothes, or even with armed

eyesight, till they become *transparent*." And thus, in grotesque fashion, with amazing vigor he ranges the universe in search of the Real. In one of his letters to Emerson, Carlyle, discussing a project of lecturing in America, takes on his sartorial professor's name, and writes: "Could any one but appoint me Lecturing Professor of Teufelsdröckh's Science, — 'Things in General'! " This work was written in his remote solitude, yet not published for years after it was finished, — and for the best of reasons, because with all his literary repute Carlyle could not find a publisher. The "Sartor" was not appreciated; and Carlyle, knowing its value, locked it up in his drawer, and waited for his time.

The "Sartor Resartus" is a sort of prose poem, written with the heart's blood, vivid as fire in a dark night; a Dantean production; a revelation probably of the author's own struggles and experiences from the dark gulf of the "Everlasting Nay" to the clear and serene heights of the "Everlasting Yea." To me the book is full of consolation and encouragement, — a battle of the spirit with infernal doubts, a victory over despair, over all external evils and all spiritual foes. It is also a bold and grotesque but scorching sarcasm of the conventionalities and hypocrisies of society, and a savage thrust at those quackeries which seem to reign in this world in

spite of their falsity and shallowness. It is not, I grant, easy to read. It is full of conceits and affectations of style, — a puzzle to some, a rebuke to others. "Every page of this unique collection of confessions and meditations, of passionate invective and solemn reflection," is stamped with the seal of genius, and yet was the last of Carlyle's writings to be appreciated. I believe that this is the ordinary fate of truly original works, those that are destined to live the longest, especially if they burn no incense to the idols of prevailing worship, and be characterized by a style which, to say the least, is extraordinary. Flashy, brilliant, witty, yet superficial pictures of external life which everybody has seen and knows, are the soonest to find admirers; but a revelation of what is not seen, this is the work of seers and prophets whose ordinary destiny has been anything other than to wear soft raiment and sit in king's palaces. The "Sartor" was at last, in 1833–1834, printed in Fraser's Magazine, meeting no appreciation in England, but very enthusiastically received by Emerson, Channing, Ripley, and a group of advanced thinkers in New England, through whose efforts it was published here in book form. And so, in spite of timid London publishers, it drifted back to London and a slow-growing fame. In our time, sixty years later, it sells by scores of thousands annually, in cheap and in

luxurious editions, throughout the English-speaking world.

In respect of early recognition and popularity, Carlyle differs from his great contemporary Macaulay, who was so immediately and so magnificently rewarded, and yet received no more than his due as the finest prose writer of his day. Macaulay's Essays are generally word-pictures of remarkable men and remarkable events, but of men of action rather than of quiet meditation. His heroes are such men as Clive and Hastings and Pitt, not such men as Pascal or Augustine or Leibnitz or Goethe. But Carlyle in his heroes paints the struggling soul in its deepest aspirations, and the truths evolved by profound meditations. These are not such as gain instant popular acceptance; yet they are the longer-lived.

The time came at last for Carlyle to leave his retirement among moors and hills, and in 1831 he directed his steps to London, spending the winter with his wife in the great centre of English life and thought, and being well received; so that in 1834 he removed permanently to the metropolis. But he was scarcely less buried at his modest house in Chelsea than he had been on his farm, for he came to London with only £200, and was obliged to practise the most rigid economy. For two years he

labored in his London workshop without earning a shilling, and with a limited acquaintance. Not yet was his society sought by the great world which he mocked and despised. He fortunately had the genial and agreeable Leigh Hunt for a neighbor, and Edward Irving for his friend. He was known to the critics by his writings, but his circle of personal friends was small. He was more or less intimate with John Stuart Mill, Charles Austin, Sir William Molesworth, and the advanced section of the philosophical radicals, — the very class of men from whom he afterwards was most estranged. None of these men forwarded his fortunes; but they lent him books, and helped him at the libraries, for no carpenter can work without tools.

The work to which Carlyle now devoted himself was a history of the French Revolution, the principal characters of which he had already studied and written about. It was a subject adapted to his genius for dramatic writing, and for the presentation of his views as to retribution. His whole theology, according to Froude, was underlaid by the belief in punishment for sin, which was impressed upon his mind by his God-fearing parents, and was one of his firmest convictions. The French were to his mind the greatest sinners among Christian nations, and therefore were to reap a fearful penalty. To paint in a new and

impressive form the inevitable calamities attendant on violated law and justice, was the aspiration of Carlyle. He had money enough to last him with economy for two years. In this time he hoped to complete his work. The possibility was due to the intelligent thrift of his wife. Commenting on one of her letters describing their snug little house, he writes: —

"From birth upwards she had lived in opulence; and now, for my sake, had become poor, — so nobly poor. Truly, her pretty little brag [in this letter] was well founded. No such house, for beautiful thrift, quiet, spontaneous, nay, as it were, unconscious — minimun of money reconciled to human comfort and human dignity — have I anywhere looked upon."

He devoted himself to his task with intense interest, and was completely preoccupied.

In the winter of 1835, after a year of general study, collection of material and writing, and at last "by dint of continual endeavor for many weary weeks," the first volume was completed and submitted to his friend Mill. The valuable manuscript was accidentally and ignorantly destroyed by a servant, and Mill was in despair. Carlyle bore the loss like a hero. He did not chide or repine. If his spirit sunk within him, it was when he was alone in his library or in the society of his sympathizing wife. He generously writes to Emerson, —

"I could not complain, or the poor man would have shot himself: we had to gather ourselves together, and show a smooth front to it, — which happily, though difficult, was not impossible to do. I began again at the beginning, to such a wretched, paralyzing torpedo of a task as my hand never found to do."

Mill made all the reparation possible. He gave his friend £200, but Carlyle would accept only £100 Few men could have rewritten with any heart that first volume: it would be almost impossible to revive sufficient interest; the precious inspiration would have been wanting. Yet Carlyle manfully accomplished his task, and I am inclined to think that the second writing was better than the first; that he probably left out what was unessential, and made a more condensed narrative, — a more complete picture, for his memory was singularly retentive. I do not believe that any man can do his best at the first heat. See how the great poets revise and rewrite. Brougham rewrote his celebrated peroration on the trial of Queen Caroline seventeen times. Carlyle had to rewrite his book, but his materials remained; his great pictures were all in his mind. In this second writing there may have been less emotion, — less fire in his descriptions; but there was fire enough, for his vivacity was excessive. Even *his* work could be pruned, not by others, but by himself. "The household at Chelsea was never closer drawn together than in those times

of trial." Carlyle lost time and spirits, but he could afford the loss. The entire work was delayed, but was done at last. The final sentence of Vol. III. was written at ten o'clock on a damp evening, January 14, 1837.

This great work, the most ambitious and famous of all Carlyle's writings, and in many respects his best, was not received by the public with the enthusiam it ought to have awakened. It was not appreciated by the people at large. "Ordinary readers were not enraptured by the Iliad swiftness and vividness of the narrative, its sustained passion, the flow of poetry, the touches of grandeur and tenderness, and the masterly touches by which he made the great actors stand out in their individuality." It seemed to many to be extravagant, exaggerated, at war with all the "feudalities of literature." Partisans of all kinds were offended. The style was startlingly broken, almost savage in strength, vivid and distinct as lightning. Doubtless the man himself had grown away from the quieter moods of his earlier essays. Froude quotes this from Carlyle's journal: "The poor people seem to think a style can be put off or on, not like a skin but like a coat. Is not a skin verily a product and close kinsfellow of all that lies under it, exact type of the nature of the beast, not to be plucked off without flaying and death? The Public is an old woman. Let her maunder and mumble."

But the extraordinary merits of the book made a great impression on the cultivated intellects of England, — such men as Jeffrey, Macaulay, Southey, Hallam, Brougham, Thackeray, Dickens, — who saw and admitted that a great genius had arisen, whether they agreed with his views or not. In America, we may be proud to say, the work created general enthusiasm, and its republication through Emerson's efforts brought some money as well as larger fame to its author. Of the first moneys that Emerson sent Carlyle as fruits of this adventure, the dyspeptic Scotchman wrote that he was "half-resolved to buy myself a sharp little nag with twenty of these trans-Atlantic pounds, and ride him till the other thirty be eaten. I will call the creature 'Yankee.' . . . My kind friends!" And *Yankee* was duly bought and ridden.

Carlyle still remained in straitened circumstances, although his reputation was now established. In order to assist him in his great necessities his friends got up lectures for him, which were attended by the *élite* of London. He gave several courses in successive years during the London season, which brought him more money than his writings at that time, gave him personal *éclat*, and added largely to his circle of admirers. His second course of twelve lectures brought him £300, — a year's harvest, and a

large sum for lectures in England, where the literary institutions rarely paid over £5 for a single lecture. Even in later times the Philosophical Society of Edinburgh, which commanded the finest talent, paid only £10 to such men as Froude and the archbishop of York.

But lecturing, to many men an agreeable excitement, seems to have been very unpleasant to Carlyle, — even repulsive. Though the lectures brought both money and fame, he abominated the delivery of them. They broke his rest, destroyed his peace of mind, and depressed his spirits. Nothing but direst necessity reconciled him to the disagreeable task. He never took any satisfaction or pride in his success in this field; nor was his success probably legitimate. People went to see him as a new literary lion, — to hear him roar, not to be edified. He had no peculiar qualification for public speaking, and he affected to despise it. Very few English men of letters have had this gift. Indeed, popular eloquence is at a discount among the cultivated classes in England. They prefer to read at their leisure. Popular eloquence best thrives in democracies, as in that of ancient Athens; aristocrats disdain it, and fear it. In their contempt for it they even affect hesitation and stammering, not only when called upon to speak in public, but also in social converse, until the halting style has come to

be known among Americans as "very English." In absolute monarchies eloquence is rare except in the pulpit or at the bar. Cicero would have had no field, and would not probably have been endured, in the reign of Nero; yet Bossuet and Bourdaloue were the delight of Louis XIV. What would that monarch have said to the speeches of Mirabeau?

After the publication in 1837 of the "French Revolution," — that "roaring conflagration of anarchies," that series of graphic pictures rather than a history or even a criticism, — it was some time before Carlyle could settle down upon another great work. He delivered lectures, wrote tracts and essays, gave vent to his humors, and nursed his ailments. He was now famous, — a man whom everybody wished to see and know, especially Americans when they came to London, but whom he generally snubbed (as he did me) and pronounced them bores. It was at this time that he made the acquaintance of Monckton Milnes, afterward Lord Houghton, who invited him to breakfast, where he met other notabilities, — among them Bunsen the Prussian Ambassador at London; Lord Mahon the historian; and Mr. Baring, afterward Lord Ashburton, the warmest and the truest of his friends, who extended to him the most generous hospitalities.

Carlyle was now in what is called "high society," and was "taking life easy," — writing but little, yet reading much, especially about Oliver Cromwell, whose Life he thought of writing. His lectures at this period were more successful than ever, attended by great and fashionable people; and from them his chief income was derived.

While collecting materials for his Life of Cromwell, Carlyle became deeply interested in the movements of the Chartists, composed chiefly of workingmen with socialistic tendencies. He was called a "radical," — and he did believe in a radical reform of men's lives, especially of the upper classes who showed but little sympathy for the poor. He was not satisfied with the Whigs, who believed that the Reform Bill would usher in a political millennium. He had more sympathy with the "conservative" Tories than the "liberal" Whigs; but his opinions were not acceptable to either of the great political parties. They alike distrusted him. Even Mill had a year before declined an article on the working classes for his Review, the Westminster. Carlyle took it to Lockhart of the Quarterly, but Lockhart was afraid to publish it. Mill, then about to leave the Westminster, wished to insert it as a final shout; but Carlyle declined, and in 1839 expanded his article into a book called "Chartism," which was rapidly sold and

loudly noticed. It gave but little satisfaction, however. It offended the conservatives by exposing sores that could not be healed, while on the other hand the radicals did not wish to be told that men were far from being equal,— that in fact they were very unequal; and that society could not be advanced by debating clubs or economical theories, but only by gifted individuals as instruments of Divine Providence, guiding mankind by their superior wisdom.

These views were expanded in a new course of lectures, on "Heroes and Hero Worship," and subsequently printed,— the most able and suggestive of all Carlyle's lectures, delivered in the spring of 1840 with great *éclat*. He never appeared on the platform again. Lecturing, as we have said, was not to his taste; he preferred to earn his living by his pen, and his writings had now begun to yield a comfortable support. He received on account of them £400 from America alone, thanks to the influence of his friend Emerson.

Carlyle now began to weary of the distraction of London life, and pined for the country. But his wife would not hear a word about it; she had had enough of the country, at Craigenputtock. Meanwhile preparations for the Life of Cromwell went on slowly, varied by visits to his relatives in Scotland, travels on the Continent, and interviews with distinguished men.

His mind at this period (1842) was most occupied with the sad condition of the English people, — everywhere riots, disturbances, physical suffering and abject poverty among the masses, for the Corn Laws had not then been repealed; and to Carlyle's vision there was a most melancholy prospect ahead, — not revolution, but universal degradation, and the reign of injustice. This sad condition of the people was contrasted in his mind with what it had been centuries before, as it appeared from an old book which he happened to read, Jocelin's Chronicles, which painted English life in the twelfth century. He fancied that the world was going on from bad to worse; and in this gloomy state of mind he wrote his "Past and Present," which appeared in 1843, and created a storm of anger as well as admiration. It was a sort of protest against the political systems of economy then so popular. Lockhart said of it that he could accept none of his friend's inferences except one, — "that we were all wrong, and were all like to be damned."

Gloomy and satirical as the book was, it made a great impression on the thinkers of the day, while it did not add to the author's popularity. It seemed as if he were a prophet of wrath, — an Ishmaelite whose hand was against everybody. He offended all political parties, — "the Tories by his radicalism, and the Radicals by his scorn of their formulas: the High Church-

man by his Protestantism, and the Low Churchman by evident unorthodoxy." Yet all parties and sects admitted that much that he said was true, while at the same time they had no sympathy with his fierce ravings.

For ten years after the publication of the "French Revolution" Carlyle assumed the functions of a prophet, hurling anathemas and pronouncing woes. To his mind everything was alike disjointed or false or pretentious, in view of which he uttered groans and hisses and maledictions. The very name of a society designed to ameliorate evils seemed to put him into a passion. Every reformer appeared to him to be a blind teacher of the blind. Exeter Hall, then the scene of every variety of social and religious and political discussion, was to him a veritable pandemonium. Everybody at that period of agitation and reform was giving lectures, and everybody went to hear them; and Carlyle ridiculed them all alike as pedlers of nostrums to heal diseases which were incurable. He lived in an atmosphere of disdain. "The English people," said he, "number some thirty millions, — mostly fools." His friends expostulated with him for giving utterance to such bitter expressions, and for holding such gloomy views. John Mill was mortally offended, and walked no more with him. De Quincey said, "You have made a new hole in your society kettle: how do you propose to mend it?"

Yet all this while Carlyle had not lost faith in Providence, as it might seem, but felt that God would inflict calamities on peoples for their sins. He resembled Savonarola more than he did Voltaire. What seemed to some to be mockeries were really the earnest protests of his soul against universal corruption, to be followed by downward courses and retribution. His mind was morbid from intense reflection on certain evils, and from his physical ailments. He doubtless grieved and alienated his best friends by his diatribes against popular education and free institutions. He even appeared to lean to despotism and the rule of tyrants, provided only they were strong.

Thus Carlyle destroyed his influence, even while he moved the mind to reflection. It was seen and felt that he had no sympathy with many movements designed to benefit society, and that he cherished utter scorn for many active philanthropists. In his bitterness, wrath, and disdain he became himself intolerant. In some of his wild utterances he brought upon himself almost universal reproach, as when he said, "I never thought the rights of negroes worth much discussing, nor the rights of man in any form," — a sentiment which militated against his whole philosophy. In this strange and unhappy mood of mind, the "Latter Day Pamphlets," "Past and Present," and other essays were written, which undermined the

reverence in which he had been held. These were the blots on his great career, which may be traced to sickness and a disordered mind.

In fact, Carlyle cannot be called a sound writer at any period. He contradicts himself. He is a great painter, a prose-poet, a satirist, — not a philosopher; perhaps the most suggestive writer of the nineteenth century, often giving utterance to the grandest thoughts, yet not a safe guide at all times, since he is inconsistent and full of exaggerations.

The morbid and unhealthy tone of Carlyle's mind at this period may be seen by an extract from one of his letters to Sterling: —

"I see almost nobody. I avoid sight, rather, and study to consume my own smoke. I wish you would build me, among your buildings, some small Prophet Chamber, fifteen feet square, with a flue for smoking, sacred from all noises of dogs, cocks, and piano-fortes, engaging some dumb old woman to light a fire for me daily, and boil some kind of a kettle."

Thus quaintly he expressed his desire for uninterrupted solitude, where he could work to advantage.

He was then engaged on Cromwell, and the few persons with whom he exchanged letters show how retired was his life. His friends were also few, although he could have met as many persons as pleased him. He was too much absorbed with work

to be what is called a society man; but what society he did see was of the best.

At last Carlyle's task on the "Life of Oliver Cromwell" was finished in August, 1845, when he was fifty years of age. It was the greatest contribution to English history, Mr. Froude thinks, which has been made in the present century. "Carlyle was the first to make Cromwell and his age intelligible to mankind." Indeed, he reversed the opinions of mankind respecting that remarkable man, which was a great accomplishment. No one doubts the genuineness of the portrait. Cromwell was almost universally supposed, fifty years ago, to be a hypocrite as well as a usurper. In Carlyle's hands he stands out visionary, perhaps, but yet practical, sincere, earnest, God-fearing, — a patriot devoted to the good of his country Carlyle rescued a great historical personage from the accumulated slanders of two centuries, and did his work so well that no hostile criticisms have modified his verdict. He has painted a picture which is immortal. The insight, the sagacity, the ability, and the statesmanship of Cromwell are impressed upon the minds of all readers. That England never had a greater or more enlightened ruler, everybody is now forced to admit, — and not merely a patriotic but a Christian ruler, who regarded himself simply as the instrument of Providence.

People still differ as to the cause in which Cromwell embarked, and few defend the means he used to accomplish his ends. He does not stand out as a perfect man; he made mistakes, and committed political crimes which can be defended only on grounds of expediency. But his private life was above reproach, and he died in the triumph of Christian faith, after having raised his country to a higher pitch of glory than had been seen since the days of Queen Elizabeth.

The faults of the biographer centre in confounding right with might; and this conspicuously false doctrine is the leading defect of the philosophy of Carlyle, runs through all his writings, and makes him an unsound teacher. If this doctrine be true, then all the usurpers of the world from Cæsar to Napoleon can be justified. If this be true, then an irresistible imperialism becomes the best government for mankind. It is but fair to say that Carlyle himself denied this inference. Writing of Lecky's having charged him with believing in the divine right of strength, he says: —

"With respect to that poor heresy of might being the symbol of right 'to a certain great and venerable author,' I shall have to tell Lecky one day that quite the converse or *re*verse is the great and venerable author's real opinion, — namely, that right is the eternal

symbol of might; . . . in fact, he probably never met with a son of Adam more contemptuous of might except when it rests on the above origin."

Yet the impression of all his strongest work is the other way.

Certain other kindred doctrines may be inferentially drawn from Carlyle's defence of Cromwell; namely, that a popular assembly is incapable of guiding successfully the destinies of a nation; that behind all constitutions lies an ultimate law of force; that majorities, as such, have no more right to rule than kings and nobles; that the strongest are the best, and the best are the strongest; that the right to rule lies with those who are right in mind and heart, as he supposed Cromwell to be, and who can execute their convictions. Such teachings, it need not be shown, are at war with the whole progress of modern society and the enlightened opinion of mankind.

The great merit of Carlyle's History is in the clearness and vividness with which he paints his hero, and the exposure of the injustice with which he has been treated by historians. It is an able vindication of Cromwell's character. But the deductions drawn from his philosophy lead to absurdity, and are an insult to the understanding of the world.

It was about this time, on the conclusion of the "Cromwell," when he was on the summit of his lite-

rary fame, and the world began to shower its favors upon him, that Carlyle's days were saddened by a domestic trouble which gave him inexpressible solicitude and grief. His wife, with whom he had lived happily for so many years, was exceedingly disturbed on account of his intimate friendship with Lady Ashburton. Nothing can be more plaintive and sadly beautiful than the letters he wrote to her on the occasion of her starting off in a fit of spleen, after a stormy scene, to visit friends at a distance; and what is singular is that we do not find in those letters, when his soul was moved to its very depths, any of his peculiarities of style. They are remarkably simple as well as serious.

Carlyle's friendship for one of the most brilliant and cultivated women of England, which the breath of scandal never for a moment assailed, was reasonable and natural, and was a great comfort to him. He persisted in enjoying it, knowing that his wife disliked it. In this matter, which was a cloud upon his married life, and saddened the family hearth for years, Mrs. Carlyle was doubtless exacting and unreasonable; though some men would have yielded the point for the sake of a faithful wife, — or even for peace. There are those who think that Carlyle was selfish in keeping up an intercourse which was hateful to his wife; but the Ashburtons were the

best friends that Carlyle ever had, after he became famous, — and in their various country seats he enjoyed a hospitality rarely extended to poor literary men. There he met in enjoyable and helpful intercourse, when he could not have seen them in his own house, some of the most distinguished men of the day, — men of rank and influence as well as those of literary fame.

Until this intimacy with the Ashburtons, no domestic disturbances of note had taken place in the Carlyle household. The wife may occasionally have been sad and lonely when her husband was preoccupied with his studies; but this she ought to have anticipated in marrying a literary man whose only support was from his pen. Carlyle, too, was an inveterate smoker, and she detested tobacco, so that he did not spend as much time in the parlor as he did in his library, where he could smoke to his heart's content. On the whole, however, their letters show genuine mutual affection, and as much connubial happiness as is common to most men and women, with far more of intimate intellectual and spiritual congeniality. Carlyle, certainly, in all his letters, ever speaks of his wife with admiration and gratitude. He regarded her as not only the most talented woman that he had ever known, but as the one without whom he was miserable. They were the best of

comrades and companions from first to last, when at home together.

For a considerable period after the publication of the Life of Cromwell, Carlyle was apparently idle. He wrote for several years nothing of note except his "Latter Day Pamphlets" (1850), and a Life of his friend John Sterling (1851), to whom he was tenderly attached. It would seem that he was now in easy circumstances, although he retained to the end his economical habits. He amused himself with travelling, and with frequent visits to distinguished people in the country. If not a society man, he was much sought; he dined often at the tables of the great, and personally knew almost every man of note in London. He sturdily took his place among distinguished men, — the intellectual peer of the greatest. He often met Macaulay, but was not intimate with him. I doubt if they even exchanged visits. The reason for this may have been that they were not congenial to each other in anything, and that the social position of Macaulay was immeasurably higher than Carlyle's. It would be hard to say which was the greater man.

It was not until 1852 or 1853, when Carlyle was fifty-eight, that he seriously set himself to write his Life of Frederic II., his last great work, on which

he perseveringly labored for thirteen years. It is an exhaustive history of the Prussian hero, and is regarded in Germany as the standard work on that great monarch and general. The first volume came out in 1858, and the last in 1865. It is a marvel of industry and accuracy, — the most elaborate of all his works, but probably the least read because of its enormous length and scholastic pedantries. It might be said to bear the same relation to his "French Revolution" that "Romola" does to "Adam Bede." In this book Carlyle made no new revelations, as he did in his Life of Cromwell. He did not change essentially the opinion of mankind. Frederick the Great, in his hands, still stands out as an unscrupulous public enemy, — a robber and a tyrant. His crimes are only partially redeemed by his heroism, especially when Europe was in arms against him. There is the same defect in this great work that there is in the Life of Cromwell, — the inculcation of the doctrine that might makes right; that we may do evil that good may come, — thus putting expediency above eternal justice, and palliating crimes because of their success. It is difficult to account for Carlyle's decline in moral perceptions, when we consider that his personal life was so far above reproach.

Although the Life of Frederick is a work of transcendent industry, it did not add to Carlyle's popu-

larity, which had been undermined by his bitter attacks on society in his various pamphlets. At this period he was still looked up to with reverence as a great intellectual giant; but that love for him which had been felt by those who were aroused to honest thinking by his earlier writings had passed away. A new generation looked upon him as an embittered and surly old man. His services were not forgotten, but he was no longer a favorite, — no longer an inspiring guide. His writings continued to stimulate thought, but were no longer regarded as sound. Commonplace people never did like him, probably because they never understood him. His admirers were among the young. the enthusiastic, the hopeful, the inquiring; and when their veneration passed away, there were few left to uphold his real greatness and noble character. One might suppose that Carlyle would have been unhappy to alienate so many persons, especially old admirers. In fact, I apprehend that he cared little for anybody's admiration or flattery. He lived in an atmosphere so infinitely above small and envious and detracting people that he was practically independent of human sympathies. Had he been doomed to live with commonplace persons, he might have sought to conciliate them; but he really lived in another sphere, — not perhaps higher than theirs, but eternally distinct, — in the sphere of abstract

truth. To him most people were either babblers or bores. What did he care for their envious shafts, or even for their honest disapprobation!

Hence, the last days of this great man were not his best days, although he was not without honor. He was made Lord Rector of the University of Edinburgh, and delivered a fine address on the occasion; and later, Disraeli, when prime minister, offered him knighthood, with the Grand Cross of the Order of the Bath and a pension, which he declined. The author of the "Sartor Resartus" did not care for titles. He preferred to remain simply Thomas Carlyle.

While Carlyle was in the midst of honors in Edinburgh, his wife, who had long been in poor health, suddenly died, April 21, 1866. This affliction was a terrible blow to Carlyle, from which he never recovered. It filled out his measure of sorrow, deep and sad, and hard to be borne. His letters after this are full of pathos and plaintive sadness. He could not get resigned to his loss, for his wife had been more and more his staff and companion as years had advanced. The Queen sent her sympathy, but nothing could console him. He was then seventy-one years old, and his work was done. His remaining years were those of loneliness and sorrow and suffering. He visited friends, but they amused him not. He wrote reminiscences, but his isolation remained. He sought out

charities when he himself was the object of compassion, — a sad old man who could not sleep. He tried to interest himself in politics, but time hung heavy on his hands. He read much and thought more, but assumed no fresh literary work. He had enough to do to correct proof-sheets of new editions of his works His fiercest protests were now against atheism in its varied forms. In 1870, Mr. Erskine, his last Scotch friend, died. In 1873 he writes: "More and more dreary, barren, base, and ugly seem to me all the aspects of this poor, diminishing quack-world, — fallen openly anarchic, doomed to a death which one can wish to be speedy."

Poor old man! He has survived his friends, his pleasures, his labors, almost his fame; he is sick, and weary of life, which to him has become a blank. Pity it is, he could not have died when "Cromwell" was completed. He drags on his forlorn life, without wife or children, and with only a few friends, in disease and ennui and discontent, almost alone, until he is eighty-five.

"To-morrow, and to-morrow, and to-morrow,
Creeps on this petty pace from day to day
To the last syllable of recorded time;
And all our yesterdays have lighted fools
The way to dusty death. Out, out, brief candle!
Life 's but a walking shadow, a poor player
That struts and frets his hour upon the stage,

> And then is heard no more. It is a tale
> Told by an idiot, full of sound and fury,
> Signifying nothing."

The relief came at last. It was on a cold day in February, 1881, that Lecky, Froude, and Tyndall, alone of his London friends, accompanied his mortal remains to Ecclefechan, where he was buried by the graves of his father and mother. He might have rested in the vaults of Westminster; but he chose to lie in a humble churchyard, near where he was born.

"In future years," says his able and interesting biographer, "Scotland will have raised a monument over his remains; but no monument is needed for one who has made an eternal memorial for himself in the hearts of all to whom truth is the dearest possession.

"'For, giving his soul to the common cause, he won for himself a wreath which will not fade, and a tomb the most honorable, — not where his dust is decaying, but where his glory lives in everlasting remembrance. For of illustrious men all the earth is the sepulchre; and it is not the inscribed column in their own land which is the record of their virtues, but the unwritten memories of them in the hearts and minds of all mankind.'"[1]

[1] Quoted by Froude from the Funeral Oration of Pericles in honor of the Athenians slain during the first summer of the Peloponnesian War, as given by Thucydides, — "their," "they," etc being changed to "his," "he," etc.

Thomas Carlyle will always have an honorable place among the great men of his time. He was pre eminently a profound thinker, a severe critic, a great word-painter, — a man of uncommon original gifts, who aroused and instructed his generation. In the literal sense, he was neither philosopher nor poet nor statesman, but a man of genius, who cast his searching and fearless glance into all creeds, systems, and public movements, denouncing hypocrisies, shams, and lies with such power that he lost friends almost as fast as he made them, — without, however, losing the respect and admiration of his literary rivals, or of the ablest and best men both in England and America. Although no believer in the scientific philosophies of our time, he was a great breaker of ground for them, having been a pioneer in the cause of honest thinking and plain speaking. His passion for truth, and courage in declaring his own vision of it, were potent for spiritual liberty. He stands as one of the earliest and stoutest champions of that revolt against authority in religious, intellectual, and social matters which has chiefly marked the Nineteenth Century.

LORD MACAULAY.

1800–1859.

ARTISTIC HISTORICAL WRITING.

LORD MACAULAY.

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AMONG the eminent men of letters of the present century, Thomas Babington Macaulay takes a very high position. In original genius he was inferior to Carlyle, but was greater in learning, in judgment, and especially in felicity of style. He was an historical artist of the foremost rank, the like of whom has not appeared since Voltaire; and he was, moreover, no mean poet, and might have been distinguished as such, had poetry been his highest pleasure and ambition. The same may be said of him as a political orator. Very few men in the House of Commons ever surpassed him in the power of making an eloquent speech. He was too impetuous and dogmatic to be a great debater, like Fox or Pitt or Peel or Gladstone; but he might have reached a more exalted and influential position as a statesman had he confined his remarkable talents to politics.

But letters were the passion of Macaulay, from his youth up; and his remarkably tenacious memory — abnormal, as it seems to me — enabled him to bring his vast store of facts to support plausibly any position he chose to take. At fifty years of age, he had probably read more books than any man in Europe since Gibbon and Niebuhr; he literally devoured everything he could put his hands upon, without cramming for a special object, — especially the Greek and Latin Classics, which he read over and over again, not so much for knowledge as for the pleasure it gave him as a literary critic and a student of artistic excellence.

Macaulay was of Scotch descent, like so many eminent historians, poets, critics, and statesmen who adorned the early and middle part of the nineteenth century, — Scott, Burns, Carlyle, Jeffrey, Dundas, Playfair, Wilson, Napier, Mackintosh, Robertson, Alison; a group of geniuses that lived in Edinburgh, and made its society famous, — to say nothing of great divines and philosophers like Chalmers and Stewart and Hamilton. Macaulay belonged to a good family, the most distinguished members of which were clergymen, — with the exception of his uncle, General Macaulay, who made a fortune in India; and his father, the celebrated merchant and philanthropist, Zachary Macaulay, who did more than any other man, Wilberforce excepted,

to do away with the slave-trade, and to abolish slavery in the West India Islands.

Zachary Macaulay was the most modest and religious of men and after an eventful life in Africa as governor of the colony of Sierra Leone, settled in Clapham, near London, with a handsome fortune. He belonged to that famous evangelical set who made Clapham famous, and whose extraordinary piety and philanthropy are commemorated by Sir James Stephen in one of his most interesting essays. They resembled in peculiarities the early Quakers and primitive Methodists, and though very narrow were much respected for their unostentatious benevolence, blended with public spirit.

Macaulay was born at Rothley Temple, in Leicestershire, Oct. 25, 1800, but it was at Clapham that his boyhood was chiefly spent. His precocity startled every one who visited his father's hospitable home. At the age of three he would lie at full length on the carpet eagerly reading. He was never seen without an open book in his hands, even during his walks. He cared nothing for the sports of his companions. He could neither ride, nor drive, nor swim, nor row a boat, nor play a game of tennis or foot-ball. He cared only for books of all sorts, which he seized upon with inextinguishable curiosity, and stored their contents in his memory. When a boy, he had learned the

"Paradise Lost" by heart. He did not care to go to school, because it interrupted his reading. Hannah More, a frequent visitor at Clapham and a warm friend of the family, gazed upon him with amazement, but was too wise and conscientious to spoil him by her commendations. At eight years of age he also had great facility in making verses, which were more than tolerable.

Zachary Macaulay objected to his son being educated in one of the great schools in England, like Westminster and Harrow, and he was therefore sent to a private school kept by an evangelical divine who had been a fellow at Cambridge, — a good scholar, but narrow in his theological views. Indeed, Macaulay got enough of Calvinism before he went to college, and was so unwisely crammed with it at home and at school, that through life he had a repugnance to the evangelical doctrines of the Low Church, with which, much to the grief of his father, he associated cant, always his especial abhorrence and disgust. While Macaulay venerated his father, he had little sympathy with his views, and never loved him as he did his own sisters. He did his filial duty, and that was all, — contributed largely to his father's support in later life, treated him with profound respect, but was never drawn to him in affectionate frankness and confidence.

It cannot be disguised that Macaulay was worldly in his turn of mind, intensely practical, and am-

bitious of distinction as soon as he became conscious of his great powers, although in his school-days he was very modest and retiring. He was not religiously inclined, nor at all spiritually minded. An omnivorous reader seldom is narrow, and seldom is profound. Macaulay was no exception. He admired Pascal, but only for his exquisite style and his trenchant irony. He saw little in Augustine except his vast acquaintance with Latin authors. He carefully avoided writing on the Schoolmen, or Calvin, or the great divines of the seventeenth century. Bunyan he admired for his genius and perspicuous style rather than for his sentiments. Even his famous article on Bacon is deficient in spiritual insight; it is a description of the man rather than a dissertation on his philosophy. Macaulay's greatness was intellectual rather than moral; and his mental power was that of the scholar and the rhetorical artist rather than the thinker. In his masterly way of arraying facts he has never been surpassed; and in this he was so skilful that it mattered little which side he took. Like Daniel Webster, he could make any side appear plausible. Doubtless in the law he might have become a great advocate, had he not preferred literary composition instead. Had he lived in the times of the Grecian Sophists, he might have baffled Socrates, — not by his logic, but by his learning and his aptness of illustration.

Macaulay entered Trinity College, Cambridge, in 1818, being a healthy, robust young man of eighteen, after five years' training in Greek and Latin, having the eldest son of Wilberforce for a school companion. Among his contemporaries and friends at Cambridge were Charles Austin, Praed, Derwent Coleridge, Hyde Villiers, and Romilly; but I infer from his Life by Trevelyan that his circle of intimate friends was not so large as it would have been had he been fitted for college at Westminster or Eton. Nor at this time were his pecuniary circumstances encouraging. After he had obtained his first degree he supported himself, while studying for a fellowship, by taking a couple of pupils for £100 a year. Eventually he gained a fellowship worth £300 a year, which was his main support for seven years, until he obtained a government office in London. He probably would have found it easier to get a fellowship at Oxford than at Cambridge, since mathematics were uncongenial to him, his forte being languages. He was most distinguished at college for English composition and Latin declamation. In 1819 he wrote a poem, "Pompeii," which gained him the chancellor's medal,—a distinction won again in 1821 by a poem on "Evening," while the same year gave him the Craven scholarship for his classical attainments. He took his bachelor's degree in 1822, and was made a fellow of Trinity College. He did not

obtain his fellowship, however, until his third trial, being no favorite with those who had prizes and honors to bestow, because of his neglect of science and mathematics.

As a profession, Macaulay made choice of the law, being called to the bar in 1826, and at Leeds joined the Northern Circuit, of which Brougham was the leading star. But the law was not his delight. He did not like its technicalities. He spent most of his time in his chambers in literary composition, or in the galleries of the House of Commons listening to the debates. He never applied himself seriously to anything which "went against the grain." At Court he got no briefs, but his fellowship enabled him to live by practising economy. He also wrote occasional essays — excellent but not remarkable — for Knight's Quarterly Magazine. It was in this periodical, too, that his early poems were published; but he did not devote much time to this field of letters, although, as we have said, he might undoubtedly have succeeded in it. His poetry, if he had never written anything else, would not be considered much inferior to that of Sir Walter Scott, being full of life and action, and, like most everything else he did, winning him applause. Years later he felt the risk of publishing his "Lays of Ancient Rome;" but as he knew what he could do and what he could not do, or rather what would be

popular, he was not disappointed. The poems were well received, for they were eminently picturesque and vital, as well as strong, masculine, and unadorned; the rhyme and metre were also felicitous. He had no obscurities, and the spirit of his Lays was patriotic and ardent, showing his love of liberty. I think his "Battle of Ivry" is equal to anything that Scott wrote. Yet Macaulay is not regarded by the critics as a true poet; that is, he did not write poetry because he must, like Burns and Byron. His poetry was not spontaneous; it was a manufactured article, — very good of its kind, but not such as to have given him the fame which his prose writings made for him.

It was not, however, until his article on Milton appeared in the Edinburgh Review in 1825, that Macaulay's great career began. Like Byron, he woke up one morning to find himself famous. Everybody read and admired an essay the style of which was new and striking. "Where did you pick up that style?" wrote Jeffrey to the briefless barrister. It transcended in brilliancy anything which had yet appeared in the Edinburgh or Quarterly. Brougham became envious, and treated the rising light with no magnanimity or admiration.

Of course, the author of such an uncommon article as that on Milton, the praise of which was in everybody's mouth, had invitations to dinner from distin-

guished people; and these were most eagerly accepted. Macaulay rapidly became a social favorite, sought for his brilliant conversation, which was as remarkable for a young man of twenty-six as were his writings in the foremost literary journal of the world. He was not handsome, and was carelessly dressed; but he had a massive head, and rugged yet benevolent features, which lighted up with peculiar animation when he was excited. One of the first persons of note to welcome him to her table was Lady Holland, an accomplished but eccentric and plain-spoken woman, who seems to have greatly admired him. He was a frequent guest at Holland House, where for nearly half-a-century the courtly and distinguished Lord Holland and his wife entertained the most eminent men and women of the time. This gratified young Macaulay's inordinate social ambition. He scarcely mentions in his letters at this time any but peers and peeresses.

And yet he did not court the society of those he did not respect. He was not a parasite or a flatterer even of the great, but met them apparently on equal terms, as a monarch of the mind. He was at home in any circle that was not ignorant or frivolous. He was more easy than genial, for his prejudices or intellectual pride made him unkind to persons of mediocrity. It was a bold thing to cross his path.

for he came down like an avalanche on those who opposed him, not so much in anger as in contempt. I do not find that his circle of literary friends was large or intimate. He seldom alludes to Carlyle or Bulwer or Thackeray or Dickens. He has more to say of Rogers and Lord Jeffrey, and other pets of aristocratic circles, — those who were conventionally favored, like Sydney Smith; or those who gave banquets to people of fashion, like Lord Lansdowne. These were the people he loved best to associate with, who listened to his rhetoric with rapt admiration, who did not pique his vanity, and who had something to give to him, — position and *éclat*.

Macaulay was not a vain man, nor even egotistical; but he had a tremendous self-consciousness, which annoyed his equals in literary fame, and repelled such a giant as Brougham, who had no idea of sharing his throne with any one, — being more overbearing even than Macaulay, but more human. This new rival in the Edinburgh Review, of which for a long time Brougham had been dictator, was, much to Jeffrey's annoyance, not convivial. He did not drink two bottles at a sitting, but guarded his health and preserved his simple habits. Though he speaks with gusto of Lord Holland's turtle and turbot and venison and grouse, he was content when alone with a mutton-chop and a few glasses of sherry, or the October ale of Cam-

bridge, which was a part of his perquisites as Fellow. He was very exclusive, in view of the fact that he was a poor man, without aristocratic antecedents or many powerful friends. Outside the class of rank and fashion, his friends seem to have been leading politicians of the Liberal school, the stanch Whigs who passed the Reform Bill, to whom he was true. To his credit, his happiest hours were spent with his sisters in the quiet seclusion of his father's modest home. All his best letters were to them; and in these he detailed his intercourse with the great, and the splendor of their banquets and balls.

Macaulay's rise, after he had written his famous article on Milton, was rapid. The article itself, striking as it is, must be confessed to be disappointing in so far as it attempted to criticise the "Paradise Lost" and Milton's other poems. Macaulay's genius was historical, not critical; and the essay is notable rather for its review of the times of Charles I. and Archbishop Laud, of the Puritans and the Royalists, than for its literary flavor, except as a brilliant piece of composition. It was, however, the picturesque style of the new writer which was the chief attraction, and the fact that the essay came from so young a man. Macaulay followed the Milton essay with others on Macchiavelli, Dryden, Hallam's "Constitutional History," and on history in general, which displayed to

great advantage his unusual learning, his keen historic instinct, and his splendor of style. He became the most popular contributor to the Edinburgh Review, which was beginning to be dull and heavy; and this kept him before the eyes of politicians and professional men.

Macaulay's ambition was now divided between literature and politics. His first appearance as a public speaker was at an annual anti-slavery convention in London, in 1826, when he made a marked impression. He eagerly embraced the offer of a seat in the House of Commons, which was secured to him in 1830; and as soon as he entered Parliament he began to make speeches, which were carefully composed and probably committed to memory. At a single bound he became one of the leading orators of that renowned assembly. Some of his orations were masterpieces of argument and rhetoric in favor of reform, and of all liberal movements in philanthropy and education. In the opinion of eminent statesmen he was the most "rising" member of the House, and sure to become a leader among the Whigs. But he was poor, having only about £500 a year — the proceeds of his fellowship and his literary productions — to support his dignity as a legislator and meet the calls of society; so that in 1833 he was rewarded with an office in the Board of Control, which regulated the affairs of

India; this doubled his income, and made him independent. But he wanted an office in which he could lay up money for future contingencies. Therefore, in 1834, he gladly resigned his seat in Parliament and accepted the situation of a member of the Supreme Council of India, on a salary of £10,000 a year, £7000 of which he continued to save yearly; so that at the end of four years, when he returned to England, he had become a rich man, or at least independent, with leisure to do whatever he pleased.

In India, as chairman of the Board of Education, as legal adviser of the Council, and in drafting a code of penal laws for that part of the Empire, he was very useful, — although as a matter of fact the new code was too theoretically fine to be practical, and was never put in force. His personal good sense was equal to his industry and his talents, and he preserved his health by strict habits of temperance. Even in that tropical country he presented a strong contrast to the sallow, bilious officials with whom he was surrounded, and in due time returned to England in perfect health, one of the most robust of men, capable of indefinite work, which never seemed to weary him.

But in Calcutta, as in London, he employed his leisure hours in writing for the Edinburgh Review, and gave an immense impulse to its sale, for which

he was amply rewarded. Brougham complained to Jeffrey that his essays took up too much space in the Review, but the politic editor knew what was for its interest and popularity. Macaulay's long articles of sometimes over a hundred pages were received without a murmur; and every article he wrote added to his fame, since he always did his best. His essays in 1830 on Southey and Montgomery, and one in 1831 on Croker's edition of Boswell's Life of Johnson, were fierce, scathing onslaughts, even cruel and crushing, — revealing Macaulay's tremendous powers of invective and remorseless criticism, but reflecting little credit on his disposition or his judgment. His Hampden (1831) and his Burleigh (1832) remain among his finest and most inspiring historical paintings. His first essay on Lord Chatham (1834) is a notable piece of characterization; the one on Sir James Mackintosh (1835) is a most acute and brilliant historical criticism; the one on Lord Bacon (1837) is striking and has become famous, but shows Macaulay's deficiency in philosophic thought, besides being sophistical in spirit; and the article on Sir William Temple (1837) — really a history of England during the reign of William III. — is thoroughly fine.

Macaulay's residence in India, so far as political ambition was concerned, may have been a mistake. It withdrew him from an arena in which he could

have risen to great distinction and influence as a parliamentary orator. He might have been a second Fox, whom he resembled in the impetuosity of his rhetoric, if he had also possessed Fox's talents as a debater. Yet he was not a born leader of men. As a parliamentary orator he was simply a speech-maker, like the Unitarian minister Fox, or that still abler man the Quaker Bright, both of whom were great rhetoricians. It is probable that he himself understood his true sphere, which was that of a literary man, — an historical critic, appealing to intelligent people rather than to learned pedants in the universities. His service in India enabled him to write for the remainder of his life with an untrammelled pen, and to live in comfort and ease, enjoying the *otium cum dignitate*, to which he attached supreme importance, — so different from Carlyle, who toiled in poverty at Chelsea to declare truth for truth's sake, grumbling, yet lofty in his meditations, the depth of which Macaulay was incapable of appreciating.

It is, then, as a man of letters rather than as a politician that our author merits his exalted fame. Respectable as a member of the House of Commons, or as a jurist in India in compiling a code of laws, yet neither as a statesman nor as a jurist was he in his right place. The leaders of his party may have admired and praised his oratory, but they wanted

something more practical than orations, — they wanted the control of men; and so, too, the government demanded a code which would exact the esteem of lawyers and meet the wants of India rather than a composition which would read well. But as an historical critic and a luminous writer, Macaulay had no superior, — a fact which no one knew better than himself.

In 1838, on his return from India, — where he had regarded himself as in honorable exile, — Macaulay had accumulated a fortune of £30,000, to him more than a competency. This, added to the legacy of £10,000 which he had received from his uncle, General Macaulay, secured to him independence and leisure to pursue his literary work, which was paramount to every other consideration. If both from pleasure and ambition there ever was a man devoted heart and soul and body to a literary career, it was Macaulay. Nor would he now accept any political office which seriously interfered with the passion of his life. Still less would he waste his time at the dinner parties of the great, no longer to him a novelty. He was eminently social by nature, and fond of talk and controversy, with a superb physique capable of digesting the richest dishes, and of enduring the fatigues and ceremonies of fashionable life; but even the pleasures of the banquet and of culti-

vated society, to many a mere relaxation, were sacrificed to his fondness for books, — to him the greatest and truest companionship, especially when they introduced him to the life and manners of by-gone ages, and to communion with the master-minds of the world.

For relaxation, Macaulay preferred to take long walks; lounge around the book-stalls; visit the sights of London with his nieces; invite his intimate friends to simple dinners at The Albany; amuse himself with trifles, especially in company with those he loved best, in the domestic circle of his relatives, whom he treated ever with the most familiar and affectionate sympathy, — so that while they loved and revered him, they had no idea that "Uncle Tom" was a great man. His most interesting letters were to his sisters and nieces, whose amusement and welfare he had constantly in view, and who were more to him than all the world besides. Indeed, he did not write many letters except to his relatives, his publishers, and his intimate friends, who were few, considering the number of persons he was obliged to meet. He was a thoroughly domestic man, although he never married or wished to marry.

It surprises me that Macaulay's intercourse with eminent authors was so constrained. He saw very little of them; but while he did not avoid talking

with them when thrown among them, and keeping up the courtesies of life even with those he thoroughly disliked, I cannot see any evidence that he sought the society of those who were regarded as his equals in genius. He liked Milman and Mackintosh and Napier and Jeffrey and Rogers, and a few others; but his intimate intercourse was confined chiefly to these and to his family.

Macaulay's fame, however, was substantially founded and built. Sydney Smith's witty characterization of him is worth recalling: —

"I always prophesied his greatness from the first moment I saw him, then a very young and unknown man on the Northern Circuit. There are no limits to his knowledge, on small subjects as well as great; he is like a book in breeches.

"Yes, I agree, he is certainly more agreeable since his return from India. His enemies might have said before (though *I* never did so) that he talked rather too much; but now he has occasional flashes of silence that make his conversation perfectly delightful. But what is far better and more important than all this is, that I believe Macaulay to be incorruptible. You might lay ribbons, stars, garters, wealth, title, before him in vain. He has an honest, genuine love of his country; and the world could not bribe him to neglect her interests."

Macaulay now devoted several weeks of every year to travel, visiting different parts of England and the

Continent as the mood took him. In the autumn of 1838 he visited Italy, it would seem for the first time, and was, of course, enchanted. He appreciated natural scenery, but was not enthusiastic over it; nor did it make a very deep impression on him except for the moment. He loved best to visit cities and places consecrated by classical associations.

While at Rome, Macaulay received from Lord Melbourne the offer of the office of Judge Advocate; but he unhesitatingly declined it. The salary of £2500 was nothing to a scholar who already had a comfortable independence; and the duties the situation imposed were not only uncongenial, but would interfere with his literary labors.

In February, 1839, he returned to London; and now the pressure on him by his political friends to reenter public life was greater than he could resist. He was elected to Parliament as one of the members from Edinburgh, and gave his usual support to his party. In September he became War Secretary, with a seat in the Whig Cabinet under Lord Melbourne. Consequently he suspended for a while his literary tasks, conducting the business of his department with commendable industry, but without enthusiasm. In the session of 1840 and 1841, during the angry discussions pertaining to the registration of votes in Ireland, he gave proof of having profited by the severe legal

training he had received from his labors in India. During these years he found time to write a few reviews, the one on Lord Clive being the most prominent.

The great subject of political agitation at this period was the repeal of the Corn Laws. The Whig leaders had lost the earnestness which had marked their grand efforts when they carried the Reform Bill of 1832, and were more indifferent to further reforms than suited their constituents; so that, at a dangerous financial crisis in 1841, the direction of public affairs fell into the hands of the Tories, under Sir Robert Peel. This great man not only rescued the nation from its fiscal embarrassments, but having been convinced by the arguments of Cobden of the necessity of repealing the Corn Laws, he carried through that great reform, to the disgust of his party and to his own undying fame. I have treated of this period more at large in another volume of this series.[1]

Macaulay was not much moved by the fall of the ministry to which he belonged, and gladly resumed his literary labors, — the first fruits of his leisure being an essay on Warren Hastings, a companion piece to the one on Clive.

These East Indian essays constitute the most picturesque and graphic account of British conquests in

[1] Beacon Lights of History: European Leaders.

that ancient land that has been given to the public. Macaulay's intimate knowledge of the ground, and his literary resources, enabled him to picture the dazzling successes of Clive and Hastings; so that the careers of those superb military chieftains and commercial robber-statesmen, in securing for their country the control of a distant province larger than France, and in enriching the British Empire and themselves beyond all precedent in conquest, stand splendidly portrayed forever.

Macaulay had now taken apartments in The Albany, on the second floor, to which he removed his large library, and in which he comfortably lived for fifteen years. His article on Warren Hastings was followed by that on Frederic the Great. His numerous articles in the Edinburgh Review had now become so popular that there was a great demand for them in a separate form. Curiously enough, as in the case of Carlyle, it was in America that the public appreciation of these essays first took the form of book publication; and Macaulay's "Miscellanies" were published in Boston in 1840, and in Philadelphia in 1842. As these volumes began to go to England, for Macaulay's own protection they were republished by Longman, revised by the author, in 1843, and obtained an immediate and immense sale, — reaching one hundred and twenty thousand copies in England, — which added to

the fame and income of Macaulay. But he was never satisfied with the finish of his own productions; the only thing which seemed to comfort him was that the last essays were better than the first. In addition to his labors for the Edinburgh, was the publication of a volume of his poems in 1842, which was also enthusiastically received by his admirers. His last notable essays were a chivalrous article on Madame D'Arblay (January, 1843); an entirely charming account of Addison and the wits of Queen Anne's reign (July, 1843); an interesting review of the Memoirs of Barère, the French revolutionist and writer (April, 1844); and finally a second article on Lord Chatham (October, 1844), which is considered finer than the first one written twenty years earlier. More and more, however, the project of writing a History of England had taken possession of him, and he began now to forego all other literary occupation, and to devote all his leisure time to that great work.

During much of the time that Macaulay had continued writing his reviews, at the rate of about two in a year, he was an active member of Parliament, frequently addressing the House of Commons, and earning the gratitude of the country by his liberal and enlightened views, — especially those in reference to the right of Unitarians to their chapels, to the enlarged money-grant given to the Irish Roman Catholic

Maynooth College, and to the extension of copyrights. He rarely spoke without careful preparation. His speeches were forcible and fine. In the higher field of debate, however, as we have already intimated, he was not successful. In 1845 Sir Robert Peel retired, the Whigs again coming into power; and in 1846 Macaulay accepted the office of Paymaster of the Forces, because its duties were comparatively light and would not much interfere with his literary labors, while it added £2000 a year to his income. During the session of 1846 and 1847, while still in Parliament, he spoke only five times, although the House was ever ready to listen to him.

In the year 1847 the disruption of the Scotch Church was effected, and in the bitterness engendered by that movement Macaulay lost his popularity with his Edinburgh constituents. He seemed indifferent to their affairs; he answered their letters irregularly and with almost contemptuous brevity. He had no sympathy with the radicals who at that time controlled a large number of votes, and he refused to contribute towards electioneering expenses. Above all, he was absorbed in his History, and had lost much of his interest in politics. In consequence he failed to be re-elected, and not unwillingly retired to private life.

Macaulay now concentrated all his energies on the

History, which occupied his thoughts, his studies, and his pen for the most part during the remainder of his life. The first two volumes were published in the latter part of 1848; and the sale was immense, surpassing that of any historical work in the history of literature, and coming near to the sale of the novels of Sir Walter Scott. The popularity of the work was not confined to scholars and statesmen and critics, but it was equally admired by ordinary readers; and not in England and Scotland alone, but in the United States, in France, in Holland, in Germany, and other countries.

The labor expended on these books was prodigious. The author visited in person nearly all the localities in England and Ireland where the events he narrated took place. He ransacked the archives of most of the governments of Europe, and all the libraries to which he could gain access, public and private. He worked twelve hours a day, and yet produced on an average only two printed pages daily, — so careful was he in verifying his facts and in arranging his materials, writing and rewriting until no further improvement could be made.

This book was not merely the result of his researches for the last fifteen years of his life, but of his general reading for nearly fifty years, when everything he read he remembered. Says Thackeray, "He

reads twenty books to write a sentence; he travels one hundred miles to make a line of description." The extent and exactness of his knowledge were not only marvellous, but almost incredible. Mr. Buckle declared that Macaulay was perfectly accurate in all the facts which Buckle had himself investigated to write his "History of Civilization;" and so particular was he in the selection of words that he never allowed a sentence to pass muster until it was as good as he could make it. "He thought little of reconstructing a paragraph," says his biographer, "for the sake of one happy illustration." He submitted to the most tiresome mechanical drudgery in the correction of his proof-sheets. The clearness of his thought amid the profusion of his knowledge was represented in his writing by a remarkable conciseness of expression. His short, vigorous sentences are compact with details of fact, yet rich with color. His terseness has been compared to that of Tacitus. His power of condensation, aptness of phrase and epithet, and indomitable industry made him a master of rhetorical effect, in the use of his multifarious learning for the illustration of his themes.

As soon as his last proof-sheet had been despatched to the printers, Macaulay at once fell to reading a series of historians from Herodotus downward, to measure his writings with theirs. Thucydides es-

pecially utterly destroyed all the conceit which naturally would arise from his unbounded popularity, as expressed in every social and literary circle, as well as in the Reviews. Like Michael Angelo, this Englishman was never satisfied with his own productions; and the only comfort he took in the impossibility of realizing his ideal was in the comparison he made of his own works with similar ones by contemporary authors. Then he was content; and then only appeared in his letters and diary that good-natured, self-satisfied feeling which arose from the consciousness that he was one of the most fortunate authors who had ever lived. There was nothing cynical in his sense of superiority, but an amiable self-assertion and self-confidence that only made men smile, — as when Lord Palmerston remarked that "he wished he was as certain of any one thing as Tom Macaulay was of everything." This self-confidence rarely provoked opposition, except when he was positive as to things outside his sphere. He wrote and talked sensibly and luminously on financial and social questions, on art, on poetry and the drama, on philosophy and theology; but on these subjects he was not an authority with specialists. In other words, he did not, so to speak, know everything profoundly, but only superficially; yet in history, especially English history, he was profound in analysis as well as brilliant

in the narration of facts, even when there was disagreement between himself and others as to inductions he drew from those facts, — inductions colored by his strong prejudices and aristocratic surroundings.

Macaulay was not always consistent with his own theories, however. For instance, he was a firm believer in the progress of society and of civilization. He saw the enormous gulf between the ninth and the nineteenth centuries, and the unmistakable advance which, since the times of Hildebrand, the world had made in knowledge, in the arts, in liberty, and in the comforts of life, although the tide of progress had its ebb and flow in different ages and countries. Yet when he cast his eye on America, where perhaps the greatest progress had been made in the world's history within fifty years, he saw nothing but melancholy signs of anarchy and decay, — signs portending the collapse of liberty and the triumph of ignorance and crime. Thus he writes in 1857 to an American correspondent: —

"As long as you have a boundless extent of fertile and unoccupied land, your laboring population will be far more at ease than the laboring population of the Old World; but the time will come when wages will be as low, and will fluctuate as much, with you as with us. Then your institutions will fairly be brought to the test. Distress everywhere makes the laborer mutinous and discontented, and inclines him to listen with eagerness to agitators who tell him that it is a monstrous iniquity

that one man should have a million, while another cannot get a full meal. In bad years there is plenty of grumbling here, and sometimes a little rioting; but it matters little, for here the sufferers are not the rulers. The supreme power is in the hands of a class deeply interested in the security of property and the maintenance of order; accordingly the malcontents are restrained. But with you the majority is the government, and has the rich, who are always in a minority, absolutely at its mercy. The day will come when the multitude of people, none of whom has had more than a half a breakfast, or expects to have more than a half a dinner, will choose a legislature. Is it possible to doubt what sort of legislature will be chosen? On the one side is a statesman preaching patience, respect for vested rights, strict observance of the public faith; and on the other a demagogue ranting about the tyranny of capitalists and usurers, and asking why anybody should be permitted to drink champagne and ride in a carriage, while thousands of honest folks are in want of necessaries: which of the two candidates is likely to be preferred by a working-man who hears his children cry for more bread? There will be, I fear, spoliation. The spoliation will increase the distress; the distress will produce fresh spoliation. There is nothing to stop you; your Constitution is all sail and no anchor. Either civilization or liberty will perish. Either some Cæsar or Napoleon will seize the reins of government with a strong hand, or your republic will be as fearfully plundered and laid waste by barbarians in the twentieth century as the Roman Empire was in the fifth."

I do not deny that there is great force in Macaulay's reasoning and prophecy. History points to decline and ruin when public virtue has fled and government is in the hands of demagogues; for their reign has ever been succeeded by military usurpers who have preserved civilization indeed, but at the expense of liberty. Yet this reasoning applies not only to America but to England as well, — especially since, by the Reform Bill and subsequent enactments of Parliament, she has opened the gates to an increase of suffrage, which now threatens to become universal. The enfranchisement of the people — the enlarged powers of the individual under the protection and control of the commonwealth — is the Anglo-Saxon contribution to progress. It is dangerous. So is all power until its use is learned. But there is no backward step possible; the tremendous experiment must go forward, for England and America alike.

Macaulay himself was one of the most prominent of English statesmen and orators, in 1830, 1831, and 1832, to advocate the extension of the right of suffrage and the increase of popular liberties. All his writings are on the side of liberty in England; and all are in opposition to the Toryism which was so triumphant during the reign of George III. Why did he have faith in the English people of England, and yet show so little in the English people of America? He believed in politi-

cal and social progress for his own countrymen; why should he doubt the utility of the same in other countries? If vandalism is to be the fate of America, where education, the only truly conservative element, is more diffused than in England, why should it not equally triumph in that country when the masses have gained political power, as they surely will at some time, and even speedily, if the policy inaugurated by Gladstone is to triumph? For England Macaulay had unbounded hope, because he believed in progress, — in liberty, in education, in the civilizing influence of machinery, in the increasing comforts of life through the constant increase of wealth among the middle classes, and especially through the power of Christianity, in spite of the dissensions of sects, the attacks of crude philosophers, socialists, anarchists, scientists, and atheists, from one end of Christendom to the other. Why should he not have equal faith in American civilization, which, in spite of wars and strikes and commercial distresses and political corruption, has yet made a marked progress from the time of Jefferson, the apostle of equality, down to our day, — as seen especially in the multiplication of schools and colleges, in an untrammelled and watchful press, and in the active benevolence of the rich in the foundation of every kind of institution to relieve misery and want? The truth is that he, in common with most educated Eng-

lishmen of his day, — and of too many even of our own day, — cherished a silent contempt for Americans, for their literature and their institutions; and hence he was not only inconsistent in the principles which he advocated, but showed that he was not emancipated, with all his learning, from prejudices of which he ought to have been ashamed.

As time made inroads on Macaulay's strong constitution, he gave up both politics and society in the absorbing interest which he took in his History, confining himself to his library, and sometimes allowing months to pass without accepting any invitation whatever to a social gathering. No man was ever more disenchanted with society. He begrudged his time even when tempted by the calls of friendship. When visitors penetrated to his den, he bowed them out with ironical politeness. He had no favors to ask from friends or foes, for he declined political office, and was as independent as wealth or fame could make him. In 1849 he was made Lord Rector of the University of Glasgow, and the acclamations following his address were prodigious. Lord John Russell gave to Macaulay's brother John a living worth £1100. Macaulay himself was offered the professorship of History at Cambridge In one year he received for the first edition of his third and fourth volumes of the History, published in 1855, £20,000 in a single check from Longman. At the age

of forty-nine, he writes in his diary: "I have no cause for complaint, — tolerable health, competence, liberty, leisure, dear relatives and friends, and a very great literary reputation."

With all this prosperity, Macaulay now naturally set up his carriage. He dined often with the Queen, and was a great man, according to English notions. more even from his wealth and social position than from his success in letters. Lord John Russell pressed him to accept a seat in his cabinet, but "I told him," Macaulay writes, "that I should be of no use, — that I was not a debater; that it was too late to become one; that my temper, taste, and literary habits alike prevented." He was, however, induced to become again a member of Parliament, and in 1852 was elected once more for Edinburgh, which had repented of its rejection of him in 1847. But he insisted on perfect independence to vote as he pleased. He regarded this re-entrance into public life as a great personal sacrifice, since it might postpone the appearance of his next two volumes of the History. His election, however, was received with great acclamation. Even Professor Wilson, the most conservative of Scotch Tories, voted for him. It was not a party victory, but purely a personal triumph.

A serious illness now follows, — a weakness of the heart, from the effects of which Macaulay died a few

years afterwards. He retires to Clifton, and gives himself up to getting well, visiting Barley Wood, and driving in his private carriage among the most interesting scenery in the west of England. But he was never perfectly well again, although he continued to work on his History. His intimate friends saw the change in him with sadness, but he himself was serene and uncomplaining. Although he suffered from an oppression of the chest, he still on great occasions addressed the House. His mind was clear, but his voice was faint. The last speech he made was in behalf of the independence of the Scottish Church. The strain of the House of Commons proved to be too great for his now enfeebled constitution. "Nor could he conceal from himself and his friends," says Trevelyan, "that it was a grievous waste, while the reign of Anne still remained unwritten, for him to consume his scanty stock of vigor in the tedious and exhaustive routine of political existence; waiting whole evenings for the vote, and then . . . trudging home at three in the morning through the slush of a February thaw." He therefore spared himself as a member of Parliament, and carefully husbanded his powers in order to work upon his book. He gave himself more time for his annual vacation, yet would write when he could on the subjects which engrossed his life. His labors were too severe for his strength, but he worked on, and even harder and harder

At length on the 25th of November, 1855, Macaulay sent to the printer the last twenty pages of his History, and an edition of twenty-five thousand was ordered. Within a generation one hundred and forty thousand copies of the work were sold in the United Kingdom alone. Six rival translators were engaged in turning it into German; and it was published in the Polish, the Danish, the Swedish, the Italian, the French, the Dutch, the Spanish, the Hungarian, the Russian, and the Bohemian languages, to say nothing of its immense circulation in the United States. Such extraordinary literary popularity was accompanied by great honors. In 1857 Macaulay was created a British Peer and elected Lord High Steward of the borough of Cambridge. The academies of Utrecht, Munich, and Turin elected him to honorary membership. The King of Prussia made him a member of the Order of Merit. Oxford conferred on him the degree of Doctor of Civil Law, and he was elected president of the Philosophical Institution of Edinburgh. He could have little more in the way of academic and governmental honors.

The failing health of Macaulay now compelled him to resign his seat in the House of Commons. It was also thought desirable for him to vacate his apartments at The Albany, which he had occupied for fifteen years, that he might be more retired and perhaps

more comfortable. His friends, at the suggestion of Dean Milman, selected a house in Kensington, the rooms of which were small, except the library, which opened upon a beautiful lawn, adorned with flowers and shrubs; it was called Holly Lodge, and was very secluded and attractive. Here his latter days were spent, in the society of his nieces and a few devoted friends, and in dispensing simple hospitalities. His favorite form of entertainment was the breakfast, at which his guests would linger till twelve, enchanted by his conversation, for his mind showed no signs of decay.

From this charming retreat Lord Macaulay very seldom appeared in London society. Years passed without his even accepting invitations. An occasional night at a friend's house in the country, one or two nights at Windsor Castle, and one or two visits to Lord Stanhope's seat in Kent in order to consult his magnificent library, were the only visits which Macaulay made in the course of the year. He always had a dislike of visiting in private houses, much preferring hotels, where he could be free from conventional life.

Macaulay was always careful in his expenditures, wasting nothing that he might enjoy the pleasure of charity, — for he gave liberally, especially to needy and unfortunate men of letters. Once he gave £100 to a total stranger who implored his aid. In his

household he was revered, for he was the kindest and most considerate of masters, while his relatives absolutely worshipped him. At home he made no claim to the privileges of genius; he had few eccentricities; he never interfered with the pleasures of others; he never obtruded his advice, or demanded that his own views or tastes should be consulted; he was especially careful not to wound the feelings of those with whom he lived. Children were his delight and solace. Over them he seemed to have unbounded influence. He would spend the half of a busy day in playing with them, and in inventing new games for their diversion. One of his pleasures was to take them to see the sights of London. His sympathies were quick and generous; although apparently so cynical in his opinions of books, he was always affected at any touches of pathos, even to tears.

It was hard for Macaulay to realize that the time had come when he must leave untold that portion of English history with which he was more familiar than any other living man; but he submitted to the inevitable without repining. He had done what he could. Even when he was compelled to give up his daily task, his love of reading remained; a book was his solace to the last. He had no extensive acquaintance with the works of some of the best writers of his own generation, preferring the classic authors of antiquity, and

of England in the time of Anne. He did not relish Coleridge or Carlyle or Buckle or Ruskin, or indeed any writer who seemed to strain after originality of style, in defiance of the old and conservative canons He preferred Miss Austen to Dickens. He felt that he owed a great debt to the master-minds of by-gone ages, who reached perfection of style, so far as it can be attained. Even the English writers of the reign of Anne, to his mind, have never been surpassed. His admiration for Addison was unbounded. Dryden and Pope to him were greater poets than any who have succeeded them. Such a poet as Tennyson or Wordsworth he pretended he did not understand. He wanted transparent clearness of expression. Browning would have been to him an abomination. He despised the poetry of his own age, with its involved sentences, its obscurity, and its strange metres. His own poetry was as direct as Homer, as simple as Chaucer, and as graphic as Scott.

In 1859, Macaulay contrived to visit once more the English lakes and the western highlands, where he was received with great veneration, being recognized everywhere on steamers and railway stations. But his cheerfulness had now departed, although he made an effort to be agreeable. In December of this year he ceased writing in his diary The physicians pretended to think that he was better, but fainting fits

set in. On Christmas he said but little, and was constantly dropping to sleep. His relatives did not seem to think that he was in immediate danger, but the end was near He died without pain, and was buried in Westminster Abbey on the 9th of January, 1860, having for pall-bearers the most illustrious men in England He rests in the Poet's Corner, amid the tombs of Johnson and Garrick, Handel and Goldsmith, Gay and Addison, leaving behind him an immortal fame.

And what is this fame? It is not that of a philosophical historian like Guizot, for his History is not marked by profound generalizations, or even thoughtful reflections. He was not a judicial historian like Hallam, seeking to present the truth alone; for he was a partisan, full of party prejudices Nor was he an historian like Ranke, raking out the hidden facts of a remote period, and unveiling the astute diplomacy of past ages. Macaulay was a great historical painter of the realistic school, whose pictures have never been surpassed, or even equalled, for vividness and interest. In this class of historians he stands out alone and peerless, the most exciting and the most interesting of all the historians who have depicted the manners, the events, and the characters of a former age, — never by any accident dull, but fatiguing, if at all, only by his wealth of illustration and the over-brilliancy of

his coloring. He is the Titian of word-painting, and as such will live like that immortal colorist. Critics may say what they please about his rhetoric, about his partial statements, about his want of insight into deep philosophical questions; but as a painter who made his figures stand out on the historical canvas with unique vividness, Macaulay cannot fail to be regarded, as long as the English language is spoken or written, as one of the great masters of literary composition. This was the verdict pronounced by the English nation at large; and its great political and literary leaders expressed and confirmed it, when they gave him fortune and fame, elevated him to the peerage, bestowed on him stars and titles, and buried him with august solemnity among those illustrious men who gave to England its power and glory.

SHAKSPEARE; OR, THE POET.

1564–1616.

SHAKSPEARE; OR, THE POET.[1]

By RALPH WALDO EMERSON.

GREAT men are more distinguished by range and extent than by originality. If we require the originality which consists in weaving, like a spider, their web from their own bowels; in finding clay and making bricks and building the house; no great men are original. Nor does valuable originality consist in unlikeness to other men. The hero is in the press of knights and the thick of events; and seeing what men want and sharing their desire, he adds the needful length of sight and of arm to come at the desired point. The greatest genius is the most indebted man. A poet is no rattle-brain, saying what comes uppermost, and, because he says everything, saying at last something good; but a heart in unison with his time and country. There is nothing whimsical and fantastic in his production, but sweet and sad earnest, freighted with the

[1] Reprinted from "Representative Men," by permission of Messrs. Houghton, Mifflin, and Co., publishers of Emerson's works.

weightiest convictions and pointed with the most determined aim which any man or class knows of in his times.

The Genius of our life is jealous of individuals, and will not have any individual great, except through the general. There is no choice to genius. A great man does not wake up on some fine morning and say, 'I am full of life, I will go to sea and find an Antarctic continent: to-day I will square the circle: I will ransack botany and find a new food for man: I have a new architecture in my mind: I foresee a new mechanic power:' no, but he finds himself in the river of the thoughts and events, forced onward by the ideas and necessities of his contemporaries. He stands where all the eyes of men look one way, and their hands all point in the direction in which he should go. The Church has reared him amidst rites and pomps, and he carries out the advice which her music gave him, and builds a cathedral needed by her chants and processions. He finds a war raging: it educates him, by trumpet, in barracks, and he betters the instruction. He finds two counties groping to bring coal, or flour, or fish, from the place of production to the place of consumption, and he hits on a railroad. Every master has found his materials collected, and his power lay in his sympathy with his people and in his love of the materials he wrought in. What an economy of power! and what a compen-

sation for the shortness of life! All is done to his hand. The world has brought him thus far on his way. The human race has gone out before him, sunk the hills, filled the hollows, and bridged the rivers. Men, nations, poets, artisans, women, all have worked for him, and he enters into their labors. Choose any other thing, out of the line of tendency, out of the national feeling and history, and he would have all to do for himself: his powers would be expended in the first preparations. Great genial power, one would almost say, consists in not being original at all; in being altogether receptive, in letting the world do all, and suffering the spirit of the hour to pass unobstructed through the mind.

Shakspeare's youth fell in a time when the English people were importunate for dramatic entertainments. The court took offence easily at political allusions and attempted to suppress them. The Puritans, a growing and energetic party, and the religious among the Anglican church, would suppress them. But the people wanted them. Inn-yards, houses without roofs, and extemporaneous enclosures at country fairs were the ready theatres of strolling players. The people had tasted this new joy; and, as we could not hope to suppress newspapers now, — no, not by the strongest party, — neither then could king, prelate, or puritan, alone or united, suppress an organ which was ballad,

epic, newspaper, caucus, lecture, Punch and library, at the same time. Probably king, prelate, and puritan all found their own account in it. It had become, by all causes, a national interest, — by no means conspicuous, so that some great scholar would have thought of treating it in an English history, — but not a whit less considerable because it was cheap and of no account, like a baker's-shop. The best proof of its vitality is the crowd of writers which suddenly broke into this field: Kyd, Marlow, Greene, Jonson, Chapman, Dekker, Webster, Heywood, Middleton, Peele, Ford, Massinger, Beaumont and Fletcher.

The secure possession, by the stage, of the public mind, is of the first importance to the poet who works for it. He loses no time in idle experiments. Here is audience and expectation prepared. In the case of Shakspeare there is much more. At the time when he left Stratford and went up to London, a great body of stage-plays of all dates and writers existed in manuscript and were in turn produced on the boards. Here is the Tale of Troy, which the audience will bear hearing some part of, every week; the Death of Julius Cæsar, and other stories out of Plutarch, which they never tire of; a shelf full of English history, from the chronicles of Brut and Arthur down to the royal Henries, which men hear eagerly; and a string of doleful tragedies, merry Italian tales, and Spanish voyages, which all the Lon-

don 'prentices know. All the mass has been treated, with more or less skill, by every playwright, and the prompter has the soiled and tattered manuscripts. It is now no longer possible to say who wrote them first. They have been the property of the Theatre so long, and so many rising geniuses have enlarged or altered them, inserting a speech or a whole scene, or adding a song, that no man can any longer claim copyright in this work of numbers. Happily, no man wishes to. They are not yet desired in that way. We have few readers, many spectators and hearers. They had best lie where they are.

Shakspeare, in common with his comrades, esteemed the mass of old plays waste stock, in which any experiment could be freely tried. Had the *prestige* which hedges about a modern tragedy existed, nothing could have been done. The rude warm blood of the living England circulated in the play, as in street-ballads, and gave body which he wanted to his airy and majestic fancy. The poet needs a ground in popular tradition on which he may work, and which, again, may restrain his art within the due temperance. It holds him to the people, supplies a foundation for his edifice, and in furnishing so much work done to his hand, leaves him at leisure and in full strength for the audacities of his imagination. In short, the poet owes to his legend what sculpture owed to the temple. Sculp-

ture in Egypt and in Greece grew up in subordination to architecture. It was the ornament of the temple wall: at first a rude relief carved on pediments, then the relief became bolder and a head or arm was projected from the wall; the groups being still arranged with reference to the building, which serves also as a frame to hold the figures; and when at last the greatest freedom of style and treatment was reached, the prevailing genius of architecture still enforced a certain calmness and continence in the statue. As soon as the statue was begun for itself, and with no reference to the temple or palace, the art began to decline: freak, extravagance, and exhibition took the place of the old temperance. This balance-wheel, which the sculptor found in architecture, the perilous irritability of poetic talent found in the accumulated dramatic materials to which the people were already wonted, and which had a certain excellence which no single genius, however extraordinary, could hope to create.

In point of fact it appears that Shakspeare did owe debts in all directions, and was able to use whatever he found; and the amount of indebtedness may be inferred from Malone's laborious computations in regard to the First, Second, and Third parts of Henry VI., in which, "out of 6,043 lines, 1,771 were written by some author preceding Shakspeare, 2,373 by him, on the foundations laid by his predecessors, and 1,899 were

entirely his own." And the proceeding investigation hardly leaves a single drama of his absolute invention. Malone's sentence is an important piece of external history. In Henry VIII. I think I see plainly the cropping out of the original rock on which his own finer stratum was laid. The first play was written by a superior, thoughtful man, with a vicious ear. I can mark his lines, and know well their cadence. See Wolsey's soliloquy, and the following scene with Cromwell, where, instead of the metre of Shakspeare, whose secret is that the thought constructs the tune, so that reading for the sense will best bring out the rhythm,—here the lines are constructed on a given tune, and the verse has even a trace of pulpit eloquence. But the play contains through all its length unmistakable traits of Shakspeare's hand, and some passages, as the account of the coronation, are like autographs. What is odd, the compliment to Queen Elizabeth is in the bad rhythm.

Shakespeare knew that tradition supplies a better fable than any invention can. If he lost any credit of design, he augmented his resources; and, at that day, our petulant demand for originality was not so much pressed. There was no literature for the million. The universal reading, the cheap press, were unknown. A great poet who appears in illiterate times, absorbs into his sphere all the light which is anywhere radiating.

Every intellectual jewel, every flower of sentiment it is his fine office to bring to his people; and he comes to value his memory equally with his invention. He is therefore little solicitous whence his thoughts have been derived; whether through translation, whether through tradition, whether by travel in distant countries, whether by inspiration; from whatever source, they are equally welcome to his uncritical audience. Nay, he borrows very near home. Other men say wise things as well as he; only they say a good many foolish things, and do not know when they have spoken wisely. He knows the sparkle of the true stone, and puts it in high place, wherever he finds it. Such is the happy position of Homer perhaps; of Chaucer, of Saadi. They felt that all wit was their wit. And they are librarians and historiographers, as well as poets. Each romancer was heir and dispenser of all the hundred tales of the world, —

> "Presenting Thebes' and Pelops' line
> And the tale of Troy divine."

The influence of Chaucer is conspicuous in all our early literature; and more recently not only Pope and Dryden have been beholden to him, but, in the whole society of English writers, a large unacknowledged debt is easily traced. One is charmed with the opulence which feeds so many pensioners. But Chaucer is a huge borrower. Chaucer, it seems, drew continually,

through Lydgate and Caxton, from Guido di Colonna, whose Latin romance of the Trojan war was in turn a compilation from Bares Phrygius, Ovid and Statius. Then Petrarch, Boccaccio, and the Provençal poets are his benefactors; the Romaunt of the Rose is only judicious translation from William of Lorris and John of Meung; Troilus and Creseide, from Lollius of Urbino; The Cock and the Fox, from the *Lais* of Marie; The House of Fame, from the French or Italian; and poor Gower he uses as if he were only a brick-kiln or stone-quarry out of which to build his house. He steals by this apology, — that what he takes has no worth where he finds it and the greatest where he leaves it. It has come to be practically a sort of rule in literature, that a man having once shown himself capable of original writing, is entitled thenceforth to steal from the writings of others at discretion. Thought is the property of him who can entertain it and of him who can adequately place it. A certain awkwardness marks the use of borrowed thoughts; but as soon as we have learned what to do with them they become our own.

Thus all originality is relative. Every thinker is retrospective. The learned member of the legislature, at Westminster or at Washington, speaks and votes for thousands. Show us the constituency, and the now invisible channels by which the senator is made aware of their wishes; the crowd of practical and knowing men,

who, by correspondence or conversation, are feeding him with evidence, anecdotes, and estimates, and it will bereave his fine attitudes and resistance of something of their impressiveness. As Sir Robert Peel and Mr. Webster vote, so Locke and Rousseau think, for thousands; and so there were fountains all around Homer, Menu, Saadi, or Milton, from which they drew; friends, lovers, books, traditions, proverbs, — all perished — which, if seen, would go to reduce the wonder. Did the bard speak with authority? Did he feel himself overmatched by any companion? The appeal is to the consciousness of the writer. Is there at last in his breast a Delphi whereof to ask concerning any thought or thing, whether it be verily so, yea or nay? and to have answer, and to rely on that? All the debts which such a man could contract to other wit would never disturb his consciousness of originality; for the ministrations of books and of other minds are a whiff of smoke to that most private reality with which he has conversed.

It is easy to see that what is best written or done by genius in the world, was no man's work, but came by wide social labor, when a thousand wrought like one, sharing the same impulse. Our English Bible is a wonderful specimen of the strength and music of the English language. But it was not made by one man, or at one time; but centuries and churches brought it to perfection. There never was a time when there was not

some translation existing. The Liturgy, admired for its energy and pathos, is an anthology of the piety of ages and nations, a translation of the prayers and forms of the Catholic church, — these collected, too, in long periods, from the prayers and meditations of every saint and sacred writer all over the world. Grotius makes the like remark in respect to the Lord's Prayer, that the single clauses of which it is composed were already in use in the time of Christ, in the Rabbinical forms. He picked out the grains of gold. The nervous language of the Common Law, the impressive forms of our courts and the precision and substantial truth of the legal distinctions, are the contribution of all the sharp-sighted, strong-minded men who have lived in the countries where these laws govern. The translation of Plutarch gets its excellence by being translation on translation. There never was a time when there was none. All the truly idiomatic and national phrases are kept, and all others successively picked out and thrown away. Something like the same process had gone on, long before, with the originals of these books. The world takes liberties with world-books. Vedas, Æsop's Fables, Pilpay, Arabian Nights, Cid, Iliad, Robin Hood, Scottish Minstrelsy, are not the work of single men. In the composition of such works the time thinks, the market thinks, the mason, the carpenter, the merchant, the farmer, the fop, all think for us

Every book supplies its time with one good word; every municipal law, every trade, every folly of the day; and the generic catholic genius who is not afraid or ashamed to owe his originality to the originality of all, stands with the next age as the recorder and embodiment of his own.

We have to thank the researches of antiquaries, and the Shakspeare Society, for ascertaining the steps of the English drama, from the Mysteries celebrated in churches and by churchmen, and the final detachment from the church, and the completion of secular plays, from Ferrex and Porrex, and Gammer Gurton's Needle, down to the possession of the stage by the very pieces which Shakspeare altered, remodelled, and finally made his own. Elated with success and piqued by the growing interest of the problem, they have left no bookstall unsearched, no chest in a garret unopened, no file of old yellow accounts to decompose in damp and worms, so keen was the hope to discover whether the boy Shakspeare poached or not, whether he held horses at the theatre door, whether he kept school, and why he left in his will only his second-best bed to Ann Hathaway, his wife.

There is something touching in the madness with which the passing age mischooses the object on which all candles shine and all eyes are turned; the care with which it registers every trifle touching Queen Elizabeth

and King James, and the Essexes, Leicesters, Burleighs, and Buckinghams; and lets pass without a single valuable note the founder of another dynasty, which alone will cause the Tudor dynasty to be remembered, — the man who carries the Saxon race in him by the inspiration which feeds him, and on whose thoughts the foremost people of the world are now for some ages to be nourished, and minds to receive this and not another bias. A popular player; — nobody suspected he was the poet of the human race; and the secret was kept as faithfully from poets and intellectual men as from courtiers and frivolous people. Bacon, who took the inventory of the human understanding for his times, never mentioned his name. Ben Jonson, though we have strained his few words of regard and panegyric, had no suspicion of the elastic fame whose first vibrations he was attempting. He no doubt thought the praise he has conceded to him generous, and esteemed himself, out of all question, the better poet of the two.

If it need wit to know wit, according to the proverb, Shakspeare's time should be capable of recognizing it. Sir Henry Wotton was born four years after Shakspeare, and died twenty-three years after him; and I find, among his correspondents and acquaintances, the following persons: Theodore Beza, Isaac Casaubon, Sir Philip Sidney, the Earl of Essex, Lord Bacon, Sir Walter Raleigh, John Milton, Sir Henry Vane, Isaac Wal-

ton, Dr. Donne, Abraham Cowley, Bellarmine, Charles Cotton, John Pym, John Hales, Kepler, Vieta, Albericus Gentilis, Paul Sarpi, Arminius; with all of whom exists some token of his having communicated, without enumerating many others whom doubtless he saw, — Shakspeare, Spenser, Jonson, Beaumont, Massinger, the two Herberts, Marlow, Chapman and the rest. Since the constellation of great men who appeared in Greece in the time of Pericles, there was never any such society; — yet their genius failed them to find out the best head in the universe. Our poet's mask was impenetrable. You cannot see the mountain near. It took a century to make it suspected; and not until two centuries had passed, after his death, did any criticism which we think adequate begin to appear. It was not possible to write the history of Shakspeare till now; for he is the father of German literature: it was with the introduction of Shakspeare into German, by Lessing, and the translation of his works by Wieland and Schlegel, that the rapid burst of German literature was most intimately connected. It was not until the nineteenth century, whose speculative genius is a sort of living Hamlet, that the tragedy of Hamlet could find such wondering readers. Now, literature, philosophy, and thought, are Shakspearized. His mind is the horizon beyond which, at present, we do not see. Our ears are educated to music by his rhythm. Coleridge

and Goethe are the only critics who have expressed our convictions with any adequate fidelity: but there is in all cultivated minds a silent appreciation of his superlative power and beauty, which, like Christianity qualifies the period.

The Shakspeare Society have inquired in all directions, advertised the missing facts, offered money for any information that will lead to proof, — and with what result? Beside some important illustration of the history of the English stage, to which I have adverted, they have gleaned a few facts touching the property, and dealings in regard to property, of the poet. It appears that from year to year he owned a larger share in the Blackfriars' Theatre: its wardrobe and other appurtenances were his: that he bought an estate in his native village with his earnings as writer and shareholder; that he lived in the best house in Stratford; was intrusted by his neighbors with their commissions in London, as of borrowing money, and the like; that he was a veritable farmer. About the time when he was writing Macbeth, he sues Philip Rogers, in the Borough-court of Stratford, for thirty-five shillings, ten pence, for corn delivered to him at different times; and in all respects appears as a good husband, with no reputation for eccentricity or excess. He was a good-natured sort of man, an actor and shareholder in the theatre, not in any striking manner dis-

tinguished from other actors and managers. I admit the importance of this information. It was well worth the pains that have been taken to procure it.

But whatever scraps of information concerning his condition these researches may have rescued, they can shed no light upon that infinite invention which is the concealed magnet of his attraction for us. We are very clumsy writers of history. We tell the chronicle of parentage, birth, birth-place, schooling, school-mates, earning of money, marriage, publication of books, celebrity, death; and when we have come to an end of this gossip, no ray of relation appears between it and the goddess-born; and it seems as if, had we dipped at random into the "Modern Plutarch," and read any other life there, it would have fitted the poems as well. It is the essence of poetry to spring, like the rainbow daughter of Wonder, from the invisible, to abolish the past and refuse all history. Malone, Warburton, Dyce, and Collier, have wasted their oil. The famed theatres, Covent Garden, Drury Lane, the Park, and Tremont have vainly assisted. Betterton, Garrick, Kemble, Kean, and Macready dedicate their lives to this genius; him they crown, elucidate, obey, and express. The genius knows them not. The recitation begins; one golden word leaps out immortal from all this painted pedantry and sweetly torments us with invitations to its own inaccessible homes. I remember I went once to see

the Hamlet of a famed performer, the pride of the English stage; and all I then heard and all I now remember of the tragedian was that in which the tragedian had no part; simply Hamlet's question to the ghost: —

> "What may this mean,
> That thou, dead corse, again in complete steel
> Revisit'st thus the glimpses of the moon?"

That imagination which dilates the closet he writes in to the world's dimension, crowds it with agents in rank and order, as quickly reduces the big reality to be the glimpses of the moon. These tricks of his magic spoil for us the illusions of the green-room. Can any biography shed light on the localities into which the Midsummer Night's Dream admits me? Did Shakspeare confide to any notary or parish recorder, sacristan, or surrogate in Stratford, the genesis of that delicate creation? The forest of Arden, the nimble air of Scone Castle, the moonlight of Portia's villa, "the antres vast and desarts idle" of Othello's captivity, — where is the third cousin, or grand-nephew, the chancellor's file of accounts, or private letter, that has kept one word of those transcendent secrets? In fine, in this drama, as in all great works of art, — in the Cyclopæan architecture of Egypt and India, in the Phidian sculpture, the Gothic minsters, the Italian painting, the Ballads of Spain and Scotland, — the Genius draws up the ladder after him, when the creative age goes up to heaven,

and gives way to a new age, which sees the works and asks in vain for a history.

Shakspeare is the only biographer of Shakspeare; and even he can tell nothing, except to the Shakspeare in us, — that is, to our most apprehensive and sympathetic hour. He cannot step from off his tripod and give us anecdotes of his inspirations. Read the antique documents extricated, analysed and compared by the assiduous Dyce and Collier, and now read one of these skyey sentences, — aerolites, — which seem to have fallen out of heaven, and which not your experience but the man within the breast has accepted as words of fate, and tell me if they match — if the former account in any manner for the latter; or which gives the most historical insight into the man.

Hence, though our external history is so meagre, yet, with Shakspeare for biographer, instead of Aubrey and Rowe, we have really the information which is material; that which describes character and fortune; that which, if we were about to meet the man and deal with him, would most import us to know. We have his recorded convictions on those questions which knock for answer at every heart, — on life and death, on love, on wealth and poverty, on the prizes of life and the ways whereby we come at them; on the characters of men, and the influences, occult and open, which affect their fortunes; and on those mysterious and demoniacal

powers which defy our science and which yet interweave their malice and their gift in our brightest hours. Who ever read the volume of the Sonnets without finding that the poet had there revealed, under masks that are no masks to the intelligent, the lore of friendship and of love; the confusion of sentiments in the most susceptible, and, at the same time, the most intellectual of men? What trait of his private mind has he hidden in his dramas? One can discern, in his ample pictures of the gentleman and the king, what forms and humanities pleased him; his delight in troops of friends, in large hospitality, in cheerful giving. Let Timon, let Warwick, let Antonio the merchant answer for his great heart. So far from Shakspeare's being the least known, he is the one person, in all modern history, known to us. What point of morals, of manners, of economy, of philosophy, of religion, of taste, of the conduct of life, has he not settled? What mystery has he not signified his knowledge of? What office, or function, or district of man's work has he not remembered? What king has he not taught state, as Talma taught Napoleon? What maiden has not found him finer than her delicacy? What lover has he not outloved? What sage has he not outseen? What gentleman has he not instructed in the rudeness of his behavior?

Some able and appreciating critics think no criticism on Shakspeare valuable that does not rest purely on the

dramatic merit; that he is falsely judged as poet and philosopher. I think as highly as these critics of his dramatic merit, but still think it secondary. He was a full man, who liked to talk; a brain exhaling thoughts and images, which, seeking vent, found the drama next at hand. Had he been less, we should have had to consider how well he filled his place, how good a dramatist he was, — and he is the best in the world. But it turns out that what he has to say is of that weight as to withdraw some attention from the vehicle; and he is like some saint whose history is to be rendered into all languages, into verse and prose, into songs and pictures, and cut up into proverbs; so that the occasion which gave the saint's meaning the form of a conversation, or of a prayer, or of a code of laws, is immaterial compared with the universality of its application. So it fares with the wise Shakspeare and his book of life. He wrote the airs for all our modern music; he wrote the text of modern life; the text of manners; he drew the man of England and Europe, the father of the man in America; he drew the man, and described the day, and what is done in it; he read the hearts of men and women, their probity, and their second thought and wiles; the wiles of innocence, and the transitions by which virtues and vices slide into their contraries; he could divide the mother's part from the father's part in the face of the child, or draw the fine demarcations of

freedom and of fate; he knew the laws of repression which make the police of nature; and all the sweets and all the terrors of human lot lay in his mind as truly but as softly as the landscape lies on the eye. And the importance of this wisdom of life sinks the form, as of Drama or Epic, out of notice. 'T is like making a question concerning the paper on which a king's message is written.

Shakspeare is as much out of the category of eminent authors, as he is out of the crowd. He is inconceivably wise; the others, conceivably. A good reader can, in a sort, nestle into Plato's brain and think from thence; but not into Shakspeare's. We are still out of doors. For executive faculty, for creation, Shakspeare is unique. No man can imagine it better. He was the farthest reach of subtlety compatible with an individual self, — the subtilest of authors, and only just within the possibility of authorship. With this wisdom of life is the equal endowment of imaginative and of lyric power. He clothed the creatures of his legend with form and sentiments as if they were people who had lived under his roof; and few real men have left such distinct characters as these fictions. And they spoke in language as sweet as it was fit. Yet his talents never seduced him into an ostentation, nor did he harp on one string. An omnipresent humanity co-ordinates all his faculties. Give a man of talents a story to tell, and his partiality

will presently appear. He has certain observations, opinions, topics, which have some accidental prominence, and which he disposes all to exhibit. He crams this part and starves that other part, consulting not the fitness of the thing, but his fitness and strength. But Shakspeare has no peculiarity, no importunate topic; but all is duly given; no veins, no curiosities; no cow-painter, no bird-fancier, no mannerist is he; he has no discoverable egotism: the great he tells greatly; the small, subordinately. He is wise without emphasis or assertion; he is strong, as nature is strong, who lifts the land into mountain slopes without effort and by the same rule as she floats a bubble in the air, and likes as well to do the one as the other. This makes that equality of power in farce, tragedy, narrative, and love-songs; a merit so incessant that each reader is incredulous of the perception of other readers.

This power of expression, or of transferring the inmost truth of things into music and verse, makes him the type of the poet and has added a new problem to metaphysics. This is that which throws him into natural history, as a main production of the globe, and as announcing new eras and ameliorations. Things were mirrored in his poetry without loss or blur: he could paint the fine with precision, the great with compass, the tragic and the comic indifferently and without any distortion or favor. He carried his powerful execution

into minute details, to a hair point, finishes an eyelash or a dimple as firmly as he draws a mountain; and yet these, like nature's, will bear the scrutiny of the solar microscope.

In short, he is the chief example to prove that more or less of production, more or fewer pictures, is a thing indifferent. He had the power to make one picture. Daguerre learned how to let one flower etch its image on his plate of iodine, and then proceeds at leisure to etch a million. There are always objects; but there was never representation. Here is perfect representation, at last; and now let the world of figures sit for their portraits. No recipe can be given for the making of a Shakspeare; but the possibility of the translation of things into song is demonstrated.

His lyric power lies in the genius of the piece. The sonnets, though their excellence is lost in the splendor of the dramas, are as inimitable as they; and it is not a merit of lines, but a total merit of the piece; like the tone of voice of some incomparable person, so is this a speech of poetic beings, and any clause as unproducible now as a whole poem.

Though the speeches in the plays, and single lines, have a beauty which tempts the ear to pause on them for their euphuism, yet the sentence is so loaded with meaning and so linked with its foregoers and followers, that the logician is satisfied. His means are as admir-

able as his ends; every subordinate invention, by which he helps himself to connect some irreconcilable opposites, is a poem too. He is not reduced to dismount and walk because his horses are running off with him in some distant direction: he always rides.

The finest poetry was first experience; but the thought has suffered a transformation since it was an experience. Cultivated men often attain a good degree of skill in writing verses; but it is easy to read, through their poems, their personal history: any one acquainted with the parties can name every figure; this is Andrew and that is Rachel. The sense thus remains prosaic. It is a caterpillar with wings, and not yet a butterfly. In the poet's mind the fact has gone quite over into the new element of thought, and has lost all that is exuvial. This generosity abides with Shakspeare. We say, from the truth and closeness of his pictures, that he knows the lesson by heart. Yet there is not a trace of egotism.

One more royal trait properly belongs to the poet. I mean his cheerfulness, without which no man can be a poet, — for beauty is his aim. He loves virtue, not for its obligation but for its grace: he delights in the world, in man, in woman, for the lovely light that sparkles from them. Beauty, the spirit of joy and hilarity, he sheds over the universe. Epicurus relates that poetry hath such charms that a lover might for-

sake his mistress to partake of them. And the true bards have been noted for their firm and cheerful temper. Homer lies in sunshine; Chaucer is glad and erect; and Saadi says, "It was rumored abroad that I was penitent; but what had I to do with repentance?" Not less sovereign and cheerful, — much more sovereign and cheerful, is the tone of Shakspeare. His name suggests joy and emancipation to the heart of men. If he should appear in any company of human souls, who would not march in his troop? He touches nothing that does not borrow health and longevity from his festal style.

And now, how stands the account of man with this bard and benefactor, when, in solitude, shutting our ears to the reverberations of his fame, we seek to strike the balance? Solitude has austere lessons; it can teach us to spare both heroes and poets; and it weighs Shakspeare also, and finds him to share the halfness and imperfection of humanity.

Shakspeare, Homer, Dante, Chaucer, saw the splendor of meaning that plays over the visible world; knew that a tree had another use than for apples, and corn another than for meal, and the ball of the earth, than for tillage and roads: that these things bore a second and finer harvest to the mind, being emblems of its thoughts, and conveying in all their natural history a certain mute

commentary on human life. Shakspeare employed them as colors to compose his picture. He rested in their beauty; and never took the step which seemed inevitable to such genius, namely, to explore the virtue which resides in these symbols and imparts this power: — what is that which they themselves say? He converted the elements which waited on his command, into entertainments. He was master of the revels to mankind. Is it not as if one should have, through majestic powers of science, the comets given into his hand, or the planets and their moons, and should draw them from their orbits to glare with the municipal fireworks on a holiday night, and advertise in all towns, "Very superior pyrotechny this evening"? Are the agents of nature, and the power to understand them, worth no more than a street serenade, or the breath of a cigar? One remembers again the trumpet-text in the Koran, — "The heavens and the earth and all that is between them, think ye we have created them in jest?" As long as the question is of talent and mental power, the world of men has not his equal to show. But when the question is, to life and its materials and its auxiliaries, how does it profit me? What does it signify? It is but a Twelfth Night, or Midsummer Night's Dream, or Winter Evening's Tale: what signifies another picture more or less? The Egyptian verdict of the Shakspeare Societies comes to mind; that he was a jovial actor and

manager. I cannot marry this fact to his verse. Other admirable men have led lives in some sort of keeping with their thought; but this man, in wide contrast. Had he been less, had he reached only the common measure of great authors, of Bacon, Milton, Tasso, Cervantes, we might leave the fact in the twilight of human fate: but that this man of men, he who gave to the science of mind a new and larger subject than had ever existed, and planted the standard of humanity some furlongs forward into Chaos, — that he should not be wise for himself; — it must even go into the world's history that the best poet led an obscure and profane life, using his genius for the public amusement.

Well, other men, priest and prophet, Israelite, German and Swede, beheld the same objects: they also saw through them that which was contained. And to what purpose? The beauty straightway vanished; they read commandments, all-excluding mountainous duty; an obligation, a sadness, as of piled mountains, fell on them, and life became ghastly, joyless, a pilgrim's progress, a probation, beleaguered round with doleful histories of Adam's fall and curse behind us; with doomsdays and purgatorial and penal fires before us; and the heart of the seer and the heart of the listener sank in them.

It must be conceded that these are half-views of half-men. The world still wants its poet-priest, a reconciler, who shall not trifle, with Shakspeare the player, nor

shall grope in graves, with Swedenborg the mourner; but who shall see, speak, and act, with equal inspiration. For knowledge will brighten the sunshine; right is more beautiful than private affection; and love is compatible with universal wisdom.

JOHN MILTON: POET AND PATRIOT.

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JOHN MILTON: POET AND PATRIOT.[1]

By THOMAS BABINGTON MACAULAY.

TOWARD the close of the year 1823, Mr. Lemon, deputy keeper of the state-papers, in the course of his researches among the presses of his office, met with a large Latin manuscript. With it were found corrected copies of the foreign despatches written by Milton while he filled the office of secretary, and several papers relating to the Popish Trials and the Rye-house Plot. The whole was wrapped up in an envelope, subscribed *To Mr. Skinner, Merchant.* On examination, the large manuscript proved to be the long lost essay on the doctrines of Christianity, which, according to Wood and Toland, Milton finished after the Restoration, and deposited with Cyriac Skinner. Skinner, it is well known, held the same political opinions with his illustrious friend. It is therefore probable, as Mr. Lemon conjectures, that he may have fallen under the

[1] *Joannis Miltoni, Angli, de Doctrinâ Christianâ libri duo posthumi.* A Treatise on Christian Doctrine, compiled from the Holy Scriptures alone. By JOHN MILTON, translated from the Original by Charles R. Sumner, M.A., etc., etc.: 1825. From the *Edinburgh Review*, August, 1825; slightly abridged.

suspicions of the Government during that persecution of the Whigs which followed the dissolution of the Oxford Parliament, and that, in consequence of a general seizure of his papers, this work may have been brought to the office in which it has been found. But whatever the adventures of the manuscript may have been, no doubt can exist that it is a genuine relic of the great poet. . . .

The book itself will not add much to the fame of Milton. . . . Were it far more orthodox or far more heretical than it is, it would not much edify or corrupt the present generation. The men of our time are not to be converted or perverted by quartos. A few more days, and this essay will follow the *Defensio Populi* to the dust and silence of the upper shelf. The name of its author, and the remarkable circumstances attending its publication, will secure to it a certain degree of attention. For a month or two it will occupy a few minutes of chat in every drawing-room, and a few columns in every magazine; and it will then, to borrow the elegant language of the play-bills, be withdrawn, to make room for the forthcoming novelties.

We wish, however, to avail ourselves of the interest, transient as it may be, which this work has excited. The dexterous Capuchins never choose to preach on the life and miracles of a saint till they have awakened the devotional feelings of their auditors by exhibiting some

relic of him — a thread of his garment, a lock of his hair, or a drop of his blood. On the same principle, we intend to take advantage of the late interesting discovery, and, while this memorial of a great and good man is still in the hands of all, to say something of his moral and intellectual qualities. Nor, we are convinced, will the severest of our readers blame us if, on an occasion like the present, we turn for a short time from the topics of the day to commemorate, in all love and reverence, the genius and virtues of John Milton, the poet, the statesman, the philosopher, the glory of English literature, the champion and the martyr of English liberty.

It is by his poetry that Milton is best known; and it is of his poetry that we wish first to speak. By the general suffrage of the civilized world, his place has been assigned among the greatest masters of the art. His detractors, however, though outvoted, have not been silenced. There are many critics, and some of great name, who contrive in the same breath to extol the poems and to decry the poet. The works, they acknowledge, considered in themselves, may be classed among the noblest productions of the human mind. But they will not allow the author to rank with those great men who, born in the infancy of civilization, supplied, by their own powers, the want of instruction, and, though destitute of models themselves, bequeathed

to posterity models which defy imitation. Milton, it is said, inherited what his predecessors created; he lived in an enlightened age; he received a finished education; and we must therefore, if we would form a just estimate of his powers, make large deductions in consideration of these advantages.

We venture to say, on the contrary, paradoxical as the remark may appear, that no poet has ever had to struggle with more unfavorable circumstances than Milton. He doubted, as he has himself owned, whether he had not been born "an age too late." For this notion Johnson has thought fit to make him the butt of much clumsy ridicule. The poet, we believe, understood the nature of his art better than the critic. He knew that his poetical genius derived no advantage from the civilization which surrounded him, or from the learning which he had acquired; and he looked back with something like regret to the ruder age of simple words and vivid impressions.

We think that, as civilization advances, poetry almost necessarily declines. Therefore, though we fervently admire those great works of imagination which have appeared in dark ages, we do not admire them the more because they have appeared in dark ages. On the contrary, we hold that the most wonderful and splendid proof of genius is a great poem produced in a civilized age. We cannot understand why those who believe in

that most orthodox article of literary faith, that the earliest poets are generally the best, should wonder at the rule as if it were the exception. Surely the uniformity of the phenomenon indicates a corresponding uniformity in the cause.

The fact is, that common observers reason from the progress of the experimental sciences to that of the imitative arts. The improvement of the former is gradual and slow. Ages are spent in collecting materials, ages more in separating and combining them. Even when a system has been formed, there is still something to add, to alter, or to reject. Every generation enjoys the use of a vast hoard bequeathed to it by antiquity, and transmits that hoard, augmented by fresh acquisitions, to future ages. In these pursuits, therefore, the first speculators lie under great disadvantages, and, even when they fail, are entitled to praise. Their pupils, with far inferior intellectual powers, speedily surpass them in actual attainments. Every girl who has read Mrs. Marcet's little dialogues on political economy could teach Montague or Walpole many lessons in finance. Any intelligent man may now, by resolutely applying himself for a few years to mathematics, learn more than the great Newton knew after half a century of study and meditation.

But it is not thus with music, with painting, or with sculpture. Still less is it thus with poetry. The prog-

ress of refinement rarely supplies these arts with better objects of imitation. It may indeed improve the instruments which are necessary to the mechanical operations of the musician, the sculptor, and the painter. But language, the machine of the poet, is best fitted for his purpose in its rudest state. Nations, like individuals, first perceive, and then abstract. They advance from particular images to general terms. Hence the vocabulary of an enlightened society is philosophical, that of a half-civilized people is poetical.

This change in the language of men is partly the cause and partly the effect of a corresponding change in the nature of their intellectual operations, or a change by which science gains and poetry loses. Generalization is necessary to the advancement of knowledge; but particularity is indispensable to the creations of the imagination. In proportion as men know more and think more, they look less at individuals and more at classes. They therefore make better theories and worse poems. They give us vague phrases instead of images, and personified qualities instead of men. They may be better able to analyze human nature than their predecessors. But analysis is not the business of the poet. His office is to portray, not to dissect. He may believe in a moral sense, like Shaftesbury; he may refer all human actions to self-interest, like Helvetius; or he may never think about the matter at all. His

creed on such subjects will no more influence his poetry, properly so called, than the notions which a painter may have conceived respecting the lachrymal glands, or the circulation of the blood, will affect the tears of his Niobe, or the blushes of his Aurora. If Shakespeare had written a book on the motives of human actions, it is by no means certain that it would have been a good one. It is extremely improbable that it would have contained half so much able reasoning on the subject as is to be found in the Fable of the Bees. But could Mandeville have created an Iago? Well as he knew how to resolve characters into their elements, would he have been able to combine those elements in such a manner as to make up a man — a real, living, individual man?

Perhaps no person can be a poet, or can even enjoy poetry, without a certain unsoundness of mind, if anything which gives so much pleasure ought to be called unsoundness. By poetry we mean not all writing in verse, nor even all good writing in verse. Our definition excludes many metrical compositions which, on other grounds, deserve the highest praise. By poetry we mean the art of employing words in such a manner as to produce an illusion on the imagination, the art of doing by means of words what the painter does by means of colors. Thus the greatest of poets has described it, in lines universally admired for the vigor

and felicity of their diction, and still more valuable on account of the just notion which they convey of the art in which he excelled: —

> "As imagination bodies forth
> The forms of things unknown, the poet's pen
> Turns them to shapes, and gives to airy nothing
> A local habitation and a name."

These are the fruits of the "fine frenzy" which he ascribes to the poet — a fine frenzy, doubtless, but still a frenzy. Truth, indeed, is essential to poetry; but it is the truth of madness. The reasonings are just; but the premises are false. After the first suppositions have been made, everything ought to be consistent; but those first suppositions require a degree of credulity which almost amounts to a partial and temporary derangement of the intellect. Hence of all people children are the most imaginative. They abandon themselves without reserve to every illusion. Every image which is strongly presented to their mental eye produces on them the effect of reality. No man, whatever his sensibility may be, is ever affected by Hamlet or Lear as a little girl is affected by the story of poor Red Riding-hood. She knows that it is all false, that wolves cannot speak, that there are no wolves in England. Yet, in spite of her knowledge, she believes; she weeps; she trembles; she dares not go into a dark room lest she should feel the teeth of the monster at

her throat. Such is the despotism of the imagination over uncultivated minds.

In a rude state of society, men are children with a greater variety of ideas. It is therefore in such a state of society that we may expect to find the poetical temperament in its highest perfection. In an enlightened age there will be much intelligence, much science, much philosophy, abundance of just classification and subtle analysis, abundance of wit and eloquence, abundance of verses, and even of good ones; but little poetry. Men will judge and compare; but they will not create. They will talk about the old poets, and comment on them, and to a certain degree enjoy them. But they will scarcely be able to conceive the effect which poetry produced on their ruder ancestors, the agony, the ecstasy, the plenitude of belief. The Greek rhapsodists, according to Plato, could scarce recite Homer without falling into convulsions. The Mohawk hardly feels the scalping-knife while he shouts his death-song. The power which the ancient bards of Wales and Germany exercised over their auditors seems to modern readers almost miraculous. Such feelings are very rare in a civilized community, and most rare among those who participate most in its improvements. They linger longest among the peasantry.

Poetry produces an illusion on the eye of the mind, as a magic lantern produces an illusion on the eye of

the body. And, as the magic lantern acts best in a dark room, poetry effects its purpose most completely in a dark age. As the light of knowledge breaks in upon its exhibitions, as the outlines of certainty become more and more definite, and the shades of probability more and more distinct, the hues and lineaments of the phantoms which the poet calls up grow fainter and fainter. We cannot unite the incompatible advantages of reality and deception, the clear discernment of truth and the exquisite enjoyment of fiction.

He who, in an enlightened and literary society, aspires to be a great poet, must first become a little child. He must take to pieces the whole web of his mind. He must unlearn much of that knowledge which has, perhaps, constituted hitherto his chief title to superiority. His very talents will be a hinderance to him. His difficulties will be proportioned to his proficiency in the pursuits which are fashionable among his contemporaries; and that proficiency will in general be proportioned to the vigor and activity of his mind. And it is well if, after all his sacrifices and exertions, his works do not resemble a lisping man or a modern ruin. We have seen in our own time great talents, intense labor, and long meditation employed in this struggle against the spirit of the age, and employed, we will not say absolutely in vain, but with dubious success and feeble applause.

If these reasonings be just, no poet has ever triumphed over greater difficulties than Milton. He received a learned education: he was a profound and elegant classical scholar: he had studied all the mysteries of rabbinical literature: he was intimately acquainted with every language in modern Europe from which either pleasure or information was then to be derived. He was perhaps the only poet of later times who has been distinguished by the excellence of his Latin verse. The genius of Petrarch was scarcely of the first order; and his poems in the ancient language, though much praised by those who have never read them, are wretched compositions. Cowley, with all his admirable wit and ingenuity, had little imagination: nor, indeed, do we think his classical diction comparable to that of Milton. The authority of Johnson is against us on this point. But Johnson had studied the bad writers of the Middle Ages till he had become utterly insensible to the Augustan elegance, and was as ill qualified to judge between two Latin styles as an habitual drunkard to set up for a wine-taster.

Versification in a dead language is an exotic, a far-fetched, costly, sickly imitation of that which elsewhere may be found in healthful and spontaneous perfection. The soils on which this rarity flourishes are in general as ill suited to the production of vigorous native poetry as the flower-pots of a hot-house to the growth of oaks.

That the author of the Paradise Lost should have written the epistle to Manso was truly wonderful. Never before were such marked originality and such exquisite mimicry found together. Indeed, in all the Latin poems of Milton the artificial manner indispensable to such works is admirably preserved, while, at the same time, his genius gives to them a peculiar charm, an air of nobleness and freedom, which distinguishes them from all other writings of the same class. They remind us of the amusements of those angelic warriors who composed the cohort of Gabriel:—

> "About him exercised heroic games
> The unarmed youth of heaven. But o'er their heads
> Celestial armory, shield, helm, and spear,
> Hung high, with diamond flaming and with gold."

We cannot look upon the sportive exercises for which the genius of Milton ungirds itself without catching a glimpse of the gorgeous and terrible panoply which it is accustomed to wear. The strength of his imagination triumphed over every obstacle. So intense and ardent was the fire of his mind, that it not only was not suffocated beneath the weight of fuel, but penetrated the whole superincumbent mass with its own heat and radiance.

It is not our intention to attempt anything like a complete examination of the poetry of Milton. The public

has long been agreed as to the merit of the most remarkable passages, the incomparable harmony of the numbers, and the excellence of that style which no rival has been able to equal and no parodist to degrade; which displays in their highest perfection the idiomatic powers of the English tongue, and to which every ancient and every modern language has contributed something of grace, of energy, or of music. In the vast field of criticism on which we are entering, innumerable reapers have already put their sickles. Yet the harvest is so abundant that the negligent search of a straggling gleaner may be rewarded with a sheaf.

The most striking characteristic of the poetry of Milton is the extreme remoteness of the associations by means of which it acts on the reader. Its effect is produced, not so much by what it expresses, as by what it suggests; not so much by the ideas which it directly conveys, as by other ideas which are connected with them. He electrifies the mind through conductors. The most unimaginative man must understand the Iliad. Homer gives him no choice, and requires from him no exertion, but takes the whole upon himself, and sets the images in so clear a light that it is impossible to be blind to them. The works of Milton cannot be comprehended or enjoyed unless the mind of the reader cooperate with that of the writer. He does not paint a finished picture, or play for a mere passive listener. He

sketches, and leaves others to fill up the outline. He strikes the key-note, and expects his hearer to make out the melody.

We often hear of the magical influence of poetry. The expression in general means nothing; but, applied to the writings of Milton, it is most appropriate. His poetry acts like an incantation. Its merit lies less in its obvious meaning than in its occult power. There would seem, at first sight, to be no more in his words than in other words. But they are words of enchantment. No sooner are they pronounced, than the past is present and the distant near. New forms of beauty start at once into existence, and all the burial-places of the memory give up their dead. Change the structure of the sentence; substitute one synonyme for another, and the whole effect is destroyed. The spell loses its power; and he who should then hope to conjure with it would find himself as much mistaken as Cassim in the Arabian tale, when he stood crying "Open Wheat," "Open Barley," to the door that obeyed no sound but "Open Sesame." The miserable failure of Dryden in his attempt to translate into his own diction some parts of the Paradise Lost is a remarkable instance of this.

In support of these observations, we may remark that scarcely any passages in the poems of Milton are more generally known or more frequently repeated than those which are little more than muster-rolls of names. They

are not always more appropriate or more melodious than other names. But they are charmed names. Every one of them is the first link in a long chain of associated ideas. Like the dwelling-place of our infancy revisited in manhood, like the song of our country heard in a strange land, they produce upon us an effect wholly independent of their intrinsic value. One transports us back to a remote period of history. Another places us among the novel scenes and manners of a distant region. A third evokes all the dear classical recollections of childhood, the school-room, the dog-eared Virgil, the holiday, and the prize. A fourth brings before us the splendid phantoms of chivalrous romance, the trophied lists, the embroidered housings, the quaint devices, the haunted forests, the enchanted gardens, the achievements of enamoured knights, and the smiles of rescued princesses.

In none of the works of Milton is his peculiar manner more happily displayed than in the Allegro and the Penseroso. It is impossible to conceive that the mechanism of language can be brought to a more exquisite degree of perfection. These poems differ from others as ottar of roses differs from ordinary rose-water, the close-packed essence from the thin, diluted mixture. They are, indeed, not so much poems as collections of hints, from each of which the reader is to make out a poem for himself. Every epithet is a text for a stanza.

The Comus and the Samson Agonistes are works which, though of very different merit, offer some marked points of resemblance. Both are lyric poems in the form of plays. There are perhaps no two kinds of composition so essentially dissimilar as the drama and the ode. The business of the dramatist is to keep himself out of sight, and to let nothing appear but his characters. As soon as he attracts notice to his personal feelings, the illusion is broken. The effect is as unpleasant as that which is produced on the stage by the voice of a prompter or the entrance of a scene-shifter. Hence it was that the tragedies of Byron were his least successful performances. They resemble those pasteboard pictures invented by the friend of children, Mr. Newbery, in which a single movable head goes round twenty different bodies, so that the same face looks out upon us successively, from the uniform of a hussar, the furs of a judge, and the rags of a beggar. In all the characters, patriots and tyrants, haters and lovers, the frown and sneer of Harold were discernible in an instant. But this species of egotism, though fatal to the drama, is the inspiration of the ode. It is the part of the lyric poet to abandon himself, without reserve, to his own emotions.

Between these hostile elements many great men have endeavored to effect an amalgamation, but never with complete success. The Greek drama, on the model of

which the Samson was written, sprang from the ode. The dialogue was ingrafted on the chorus, and naturally partook of its character. The genius of the greatest of the Athenian dramatists co-operated with the circumstances under which tragedy made its first appearance. Æschylus was, head and heart, a lyric poet. In his time, the Greeks had far more intercourse with the East than in the days of Homer; and they had not yet acquired that immense superiority in war, in science, and in the arts, which, in the following generation, led them to treat the Asiatics with contempt. From the narrative of Herodotus it should seem that they still looked up, with the veneration of disciples, to Egypt and Assyria. At this period, accordingly, it was natural that the literature of Greece should be tinctured with the Oriental style. And that style, we think, is discernible in the works of Pindar and Æschylus. The latter often reminds us of the Hebrew writers. The Book of Job, indeed, in conduct and diction, bears a considerable resemblance to some of his dramas. Considered as plays, his works are absurd; considered as choruses they are above all praise. If, for instance, we examine the address of Clytemnestra to Agamemnon on his return, or the description of the seven Argive chiefs, by the principles of dramatic writing, we shall instantly condemn them as monstrous. But if we forget the characters, and think only of the poetry, we shall admit that it has

never been surpassed in energy and magnificence. Sophocles made the Greek drama as dramatic as was consistent with its original form. His portraits of men have a sort of similarity; but it is the similarity, not of a painting, but of a bass-relief. It suggests a resemblance; but it does not produce an illusion. Euripides attempted to carry the reform further. But it was a task far beyond his powers, perhaps beyond any powers. Instead of correcting what was bad, he destroyed what was excellent. He substituted crutches for stilts, bad sermons for good odes.

Milton, it is well known, admired Euripides highly, much more highly than, in our opinion, Euripides deserved. Indeed, the caresses which this partiality leads our countryman to bestow on "sad Electra's poet" sometimes remind us of the beautiful Queen of Fairy-land kissing the long ears of Bottom. At all events, there can be no doubt that this veneration for the Athenian, whether just or not, was injurious to the Samson Agonistes. Had Milton taken Æschylus for his model, he would have given himself up to the lyric inspiration, and poured out profusely all the treasures of his mind, without bestowing a thought on those dramatic properties which the nature of the work rendered it impossible to preserve. In the attempt to reconcile things in their own nature inconsistent he has failed, as every one else must have failed. We cannot identify ourselves with

the characters, as in a good play. We cannot identify ourselves with the poet, as in a good ode. The conflicting ingredients, like an acid and an alkali mixed, neutralize each other. We are by no means insensible to the merits of this celebrated piece, to the severe dignity of the style, the graceful and pathetic solemnity of the opening speech, or the wild and barbaric melody which gives so striking an effect to the choral passages. But we think it, we confess, the least successful effort of the genius of Milton.

The Comus is framed on the model of the Italian Masque, as the Samson is framed on the model of the Greek Tragedy. It is certainly the noblest performance of the kind which exists in any language. It is as far superior to The Faithful Shepherdess, as The Faithful Shepherdess is to the Aminta, or the Aminta to the Pastor Fido. It was well for Milton that he had here no Euripides to mislead him. He understood and loved the literature of modern Italy. But he did not feel for it the same veneration which he entertained for the remains of Athenian and Roman poetry, consecrated by so many lofty and endearing recollections. The faults, moreover, of his Italian predecessors were of a kind to which his mind had a deadly antipathy. He could stoop to a plain style, sometimes even to a bald style; but false brilliancy was his utter aversion. His muse had no objection to a russet attire; but she turned

with disgust from the finery of Guarini, as tawdry and as paltry as the rags of a chimney-sweeper on May-day. Whatever ornaments she wears are of massive gold, not only dazzling to the sight, but capable of standing the severest test of the crucible.

Milton attended in the Comus to the distinction which he afterward neglected in the Samson. He made his Masque what it ought to be, essentially lyrical, and dramatic only in semblance. He has not attempted a fruitless struggle against a defect inherent in the nature of that species of composition; and he has therefore succeeded, wherever success was not impossible. The speeches must be read as majestic soliloquies; and he who so reads them will be enraptured with their eloquence, their sublimity, and their music. The interruptions of the dialogue, however, impose a constraint upon the writer, and break the illusion of the reader. The finest passages are those which are lyric in form as well as in spirit. "I should much commend," says the excellent Sir Henry Wotton in a letter to Milton, "the tragical part if the lyrical did not ravish me with a certain Dorique delicacy in your songs and odes, whereunto, I must plainly confess to you, I have seen yet nothing parallel in our language." The criticism was just. It is when Milton escapes from the shackles of the dialogue, when he is discharged from the labor of uniting two incongruous styles, when he is at liberty to

indulge his choral raptures without reserve, that he rises even above himself. Then, like his own good Genius bursting from the earthly form and weeds of Thyrsis, he stands forth in celestial freedom and beauty; he seems to cry exultingly,

> "Now my task is smoothly done,
> I can fly or I can run,"

to skim the earth, to soar above the clouds, to bathe in the Elysian dew of the rainbow, and to inhale the balmy smells of nard and cassia, which the musky winds of the zephyr scatter through the cedared alleys of the Hesperides.

There are several of the minor poems of Milton on which we would willingly make a few remarks. Still more willingly would we enter into a detailed examination of that admirable poem, the Paradise Regained, which, strangely enough, is scarcely ever mentioned except as an instance of the blindness of the parental affection which men of letters bear toward the offspring of their intellects. That Milton was mistaken in preferring this work, excellent as it is, to the Paradise Lost, we readily admit. But we are sure that the superiority of the Paradise Lost to the Paradise Regained is not more decided than the superiority of the Paradise Regained to every poem which has since made its appearance. Our limits, however, prevent us

from discussing the point at length. We hasten on to that extraordinary production which the general suffrage of critics has placed in the highest class of human compositions.

The only poem of modern times which can be compared with the Paradise Lost is the Divine Comedy. The subject of Milton, in some points, resembled that of Dante; but he has treated it in a widely different manner. We cannot, we think, better illustrate our opinion respecting our own great poet than by contrasting him with the father of Tuscan literature.

The poetry of Milton differs from that of Dante as the hieroglyphics of Egypt differed from the picture-writing of Mexico. The images which Dante employs speak for themselves; they stand simply for what they are. Those of Milton have a signification which is often discernible only to the initiated. Their value depends less on what they directly represent than on what they remotely suggest. However strange, however grotesque, may be the appearance which Dante undertakes to describe, he never shrinks from describing it. He gives us the shape, the color, the sound, the smell, the taste; he counts the numbers; he measures the size. His similes are the illustrations of a traveller Unlike those of other poets, and especially of Milton, they are introduced in a plain, business-like manner; not for the sake of any beauty in the objects from which

they are drawn; not for the sake of any ornament which they may impart to the poem; but simply in order to make the meaning of the writer as clear to the reader as it is to himself. The ruins of the precipice which led from the sixth to the seventh circle of hell were like those of the rock which fell into the Adige on the south of Trent. The cataract of Phlegethon was like that of Aqua Cheta at the Monastery of St Benedict. The place where the heretics were confined in burning tombs resembled the vast cemetery of Arles.

Now let us compare with the exact details of Dante the dim intimations of Milton. We will cite a few examples. The English poet has never thought of taking the measure of Satan. He gives us merely a vague idea of vast bulk. In one passage the fiend lies stretched out huge in length, floating many a rood, equal in size to the earth-born enemies of Jove, or to the sea-monster which the mariner mistakes for an island. When he addresses himself to battle against the guardian angels he stands like Teneriffe or Atlas: his stature reaches the sky. Contrast with these descriptions the lines in which Dante has described the gigantic spectre of Nimrod. "His face seemed to me as long and as broad as the ball of St. Peter's at Rome; and his other limbs were in proportion; so that the bank, which concealed him from the waist downwards, nevertheless showed so much of him that three tall Germans would

in vain have attempted to reach to his hair." We are sensible that we do no justice to the admirable style of the Florentine poet. But Mr. Cary's translation is not at hand; and our version, however rude, is sufficient to illustrate our meaning.

Once more, compare the lazar-house in the eleventh book of the Paradise Lost with the last ward of Malebolge in Dante. Milton avoids the loathsome details, and takes refuge in indistinct but solemn and tremendous imagery — Despair hurrying from couch to couch to mock the wretches with his attendance, Death shaking his dart over them, but, in spite of supplications, delaying to strike. What says Dante? "There was such a moan there as there would be if all the sick who, between July and September, are in the hospitals of Valdichiana, and of the Tuscan swamps, and of Sardinia, were in one pit together; and such a stench was issuing forth as is wont to issue from decayed limbs."

We will not take upon ourselves the invidious office of settling precedency between two such writers. Each in his own department is incomparable; and each, we may remark, has wisely, or fortunately, taken a subject adapted to exhibit his peculiar talent to the greatest advantage. The Divine Comedy is a personal narrative. Dante is the eye-witness and ear-witness of that which he relates. He is the very man who has heard

the tormented spirits crying out for the second death, who has read the dusky characters on the portal within which there is no hope, who has hidden his face from the terrors of the Gorgon, who has fled from the hooks and the seething pitch of Barbariccia and Draghignazzo. His own hands have grasped the shaggy sides of Lucifer. His own feet have climbed the mountain of expiation. His own brow has been marked by the purifying angel. The reader would throw aside such a tale in incredulous disgust, unless it were told with the strongest air of veracity, with a sobriety even in its horrors, with the greatest precision and multiplicity in its details. The narrative of Milton in this respect differs from that of Dante as the adventures of Amadis differ from those of Gulliver. The author of Amadis would have made his book ridiculous if he had introduced those minute particulars which give such a charm to the work of Swift, the nautical observations, the affected delicacy about names, the official documents transcribed at full length, and all the unmeaning gossip and scandal of the court, springing out of nothing, and tending to nothing. We are not shocked at being told that a man who lived, nobody knows when, saw many very strange sights, and we can easily abandon ourselves to the illusion of the romance. But when Lemuel Gulliver, surgeon, resident at Rotherhithe, tells us of pigmies and giants, flying

islands, and philosophizing horses, nothing but such circumstantial touches could produce for a single moment a deception on the imagination.

Of all the poets who have introduced into their works the agency of supernatural beings, Milton has succeeded best. Here Dante decidedly yields to him; and as this is a point on which many rash and ill-considered judgments have been pronounced, we feel inclined to dwell on it a little longer. The most fatal error which a poet can possibly commit in the management of his machinery is that of attempting to philosophize too much. Milton has been often censured for ascribing to spirits many functions of which spirits must be incapable. But these objections, though sanctioned by eminent names, originate, we venture to say, in profound ignorance of the art of poetry.

What is spirit? What are our own minds, the portion of spirit with which we are best acquainted? We observe certain phenomena. We cannot explain them into material causes. We therefore infer that there exists something which is not material. But of this something we have no idea. We can define it only by negatives. We can reason about it only by symbols. We use the word, but we have no image of the thing; and the business of poetry is with images, and not with words. The poet uses words, indeed; but they are merely the instruments of his art, not its objects. They

are the materials which he is to dispose in such a manner as to present a picture to the mental eye. And if they are not so disposed, they are no more entitled to be called poetry than a bale of canvas and a box of colors to be called a painting.

Logicians may reason about abstractions. But the great mass of men must have images. The strong tendency of the multitude in all ages and nations to idolatry can be explained on no other principle. The first inhabitants of Greece, there is reason to believe, worshipped one invisible Deity. But the necessity of having something more definite to adore produced, in a few centuries, the innumerable crowd of gods and goddesses. In like manner the ancient Persians thought it impious to exhibit the creator under a human form. Yet even these transferred to the sun the worship which, in speculation, they considered due only to the Supreme Mind. The history of the Jews is the record of a continued struggle between pure Theism, supported by the most terrible sanctions, and the strangely fascinating desire of having some visible and tangible object of adoration. Perhaps none of the secondary causes which Gibbon has assigned for the rapidity with which Christianity spread over the world, while Judaism scarcely ever acquired a proselyte, operated more powerfully than this feeling. God, the uncreated, the incomprehensible, the invisible, attracted few worshippers.

A philosopher might admire so noble a conception; but the crowd turned away in disgust from words which presented no image to their minds. It was before Deity embodied in a human form, walking among men, partaking of their infirmities, leaning on their bosoms, weeping over their graves, slumbering in the manger, bleeding on the cross, that the prejudices of the Synagogue, and the doubts of the Academy, and the pride of the Portico, and the fasces of the Lictor, and the swords of thirty legions, were humbled in the dust. Soon after Christianity had achieved its triumph, the principle which had assisted it began to corrupt it. It became a new paganism. Patron saints assumed the offices of household gods. St. George took the place of Mars. St. Elmo consoled the mariner for the loss of Castor and Pollux.

The fascination of sex and admiration for loveliness was again joined to that of celestial dignity; and the homage of chivalry was blended with that of religion. Reformers have often made a stand against these feelings; but never with more than apparent and partial success. The men who demolished the images in cathedrals have not always been able to demolish those which were enshrined in their minds. It would not be difficult to show that in politics the same rule holds good. Doctrines, we are afraid, must generally be embodied before they can excite

a strong public feeling. The multitude is more easily interested for the most unmeaning badge, or the most insignificant name, than for the most important principle.

From these considerations, we infer that no poet who should affect that metaphysical accuracy for the want of which Milton has been blamed would escape a disgraceful failure. Still, however, there was another extreme which, though far less dangerous, was also to be avoided. The imaginations of men are in a great measure under the control of their opinions. The most exquisite art of poetical coloring can produce no illusion when it is employed to represent that which is at once perceived to be incongruous and absurd. Milton wrote in an age of philosophers and theologians. It was necessary, therefore, for him to abstain from giving such a shock to their understandings as might break the charm which it was his object to throw over their imaginations. This is the real explanation of the indistinctness and inconsistency with which he has often been reproached. Dr. Johnson acknowledges that it was absolutely necessary that the spirit should be clothed with material forms. "But," says he, "the poet should have secured the consistency of his system by keeping immateriality out of sight, and seducing the reader to drop it from his thoughts." This is easily said; but what if Milton could not seduce his readers to drop immateriality from their thoughts? What if

the contrary opinion had taken so full a possession of the minds of men as to leave no room even for the half-belief which poetry requires? Such we suspect to have been the case. It was impossible for the poet to adopt altogether the material or the immaterial system. He therefore took his stand on the debatable ground. He left the whole in ambiguity. He has doubtless, by so doing, laid himself open to the charge of inconsistency. But, though philosophically in the wrong, we cannot but believe that he was poetically in the right. This task, which almost any other writer would have found impracticable, was easy to him. The peculiar art which he possessed of communicating his meaning circuitously through a long succession of associated ideas, and of intimating more than he expressed, enabled him to disguise those incongruities which he could not avoid.

Poetry which relates to the beings of another world ought to be at once mysterious and picturesque. That of Milton is so. That of Dante is picturesque, indeed, beyond any that ever was written. Its effect approaches to that produced by the pencil or the chisel. But it is picturesque to the exclusion of all mystery. This is a fault on the right side, a fault inseparable from the plan of Dante's poem, which, as we have already observed, rendered the utmost accuracy of description necessary. Still it is a fault. The supernatural

agents excite an interest; but it is not the interest which is proper to supernatural agents. We feel that we could talk to the ghosts and demons without any emotion of unearthly awe. We could, like Don Juan, ask them to supper, and eat heartily in their company. Dante's angels are good men with wings. His devils are spiteful, ugly executioners. His dead men are merely living men in strange situations. The scene which passes between the poet and Farinata is justly celebrated. Still, Farinata in the burning tomb is exactly what Farinata would have been at an *auto-da-fé*. Nothing can be more touching than the first interview of Dante and Beatrice. Yet what is it but a lovely woman chiding, with sweet, austere composure, the lover for whose affection she is grateful, but whose vices she reprobates? The feelings which give the passage its charm would suit the streets of Florence as well as the summit of the Mount of Purgatory.

The spirits of Milton are unlike those of almost all other writers. His fiends, in particular, are wonderful creations. They are not metaphysical abstractions. They are not wicked men. They are not ugly beasts. They have no horns, no tails, none of the fee-faw-fum of Tasso and Klopstock. They have just enough in common with human nature to be intelligible to human beings. Their characters are, like their forms, marked by a certain dim resemblance to those of men,

but exaggerated to gigantic dimensions, and veiled in mysterious gloom.

Perhaps the gods and demons of Æschylus may best bear a comparison with the angels and devils of Milton. The style of the Athenian had, as we have remarked, something of the Oriental character; and the same peculiarity may be traced in his mythology. It has nothing of the amenity and elegance which we generally find in the superstitions of Greece. All is rugged, barbaric, and colossal. The legends of Æschylus seem to harmonize less with the fragrant groves and graceful porticos in which his countrymen paid their vows to the God of Light and Goddess of Desire than with those huge and grotesque labyrinths of eternal granite in which Egypt enshrined her mystic Osiris, or in which Hindostan still bows down to her seven-headed idols. His favorite gods are those of the elder generation, the sons of heaven and earth, compared with whom Jupiter himself was a stripling and an upstart, the gigantic Titans, and the inexorable Furies. Foremost among his creations of this class stands Prometheus, half fiend, half redeemer, the friend of man, the sullen and implacable enemy of heaven. Prometheus bears undoubtedly a considerable resemblance to the Satan of Milton. In both we find the same impatience of control, the same ferocity, the same unconquerable pride. In both characters also are mingled, though in

very different proportions, some kind and generous feelings. Prometheus, however, is hardly superhuman enough. He talks too much of his chains and his uneasy posture; he is rather too much depressed and agitated. His resolution seems to depend on the knowledge which he possesses that he holds the fate of his torturer in his hands, and that the hour of his release will surely come. But Satan is a creature of another sphere. The might of his intellectual nature is victorious over the extremity of pain. Amidst agonies which cannot be conceived without horror, he deliberates, resolves, and even exults. Against the sword of Michael, against the thunder of Jehovah, against the flaming lake, and the marl burning with solid fire, against the prospect of an eternity of unintermitted misery, his spirit bears up unbroken, resting on its own innate energies, requiring no support from anything external, nor even from hope itself.

To return for a moment to the parallel which we have been attempting to draw between Milton and Dante, we would add that the poetry of these great men has in a considerable degree taken its character from their moral qualities. They are not egotists. They rarely obtrude their idiosyncrasies on their readers. They have nothing in common with those modern beggars for fame who extort a pittance from the compassion of the inexperienced by exposing the

nakedness and sores of their minds. Yet it would be difficult to name two writers whose works have been more completely, though undesignedly, colored by their personal feelings.

The character of Milton was peculiarly distinguished by loftiness of spirit; that of Dante by intensity of feeling. In every line of the Divine Comedy we discern the asperity which is produced by pride struggling with misery. There is perhaps no work in the world so deeply and uniformly sorrowful. The melancholy of Dante was no fantastic caprice. It was not, as far as at this distance of time can be judged, the effect of external circumstances. It was from within. Neither love nor glory, neither the conflicts of earth nor the hope of heaven, could dispel it. It turned every consolation and every pleasure into its own nature. It resembled that noxious Sardinian soil of which the intense bitterness is said to have been perceptible even in its honey. His mind was, in the noble language of the Hebrew poet, "a land of darkness, as darkness itself, and where the light was as darkness." The gloom of his character discolors all the passions of men, and all the face of nature, and tinges with its own livid hue the flowers of Paradise and the glories of the eternal throne. All the portraits of him are singularly characteristic. No person can look on the features, noble even to ruggedness — the dark furrows

of the cheek, the haggard and woful stare of the eye the sullen and contemptuous curve of the lip — and doubt that they belong to a man too proud and too sensitive to be happy.

Milton was, like Dante, a statesman and a lover; and, like Dante, he had been unfortunate in ambition and in love. He had survived his health and his sight, the comforts of his home, and the prosperity of his party. Of the great men by whom he had been distinguished at his entrance into life, some had been taken away from the evil to come; some had carried into foreign climates their unconquerable hatred of oppression; some were pining in dungeons; and some had poured forth their blood on scaffolds. Venal and licentious scribblers, with just sufficient talent to clothe the thoughts of a pander in the style of a bellman, were now the favorite writers of the Sovereign and of the public. It was a loathsome herd, which could be compared to nothing so fitly as to the rabble of Comus, grotesque monsters, half bestial, half human, dropping with wine, bloated with gluttony, and reeling in obscene dances. Amidst these that fair Muse was placed, like the chaste lady of the Masque, lofty, spotless, and serene, to be chattered at, and pointed at, and grinned at, by the whole rout of Satyrs and Goblins. If ever despondency and asperity could be excused in any man, they might have been excused in Milton.

But the strength of his mind overcame every calamity. Neither blindness, nor gout, nor age, nor penury, nor domestic afflictions, nor political disappointments, nor abuse, nor proscription, nor neglect had power to disturb his sedate and majestic patience. His spirits do not seem to have been high, but they were singularly equable. His temper was serious, perhaps stern; but it was a temper which no sufferings could render sullen or fretful. Such as it was when, on the eve of great events, he returned from his travels, in the prime of health and manly beauty, loaded with literary distinctions, and glowing with patriotic hopes, such it continued to be when, after having experienced every calamity which is incident to our nature, old, poor, sightless, and disgraced, he retired to his hovel to die.

Hence it was that, though he wrote the Paradise Lost at a time of life when images of beauty and tenderness are in general beginning to fade, even from those minds in which they have not been effaced by anxiety and disappointment, he adorned it with all that is most lovely and delightful in the physical and in the moral world. Neither Theocritus nor Ariosto had a finer or a more healthful sense of the pleasantness of external objects, or loved better to luxuriate amidst sunbeams and flowers, the songs of nightingales, the juice of summer fruits, and the coolness of shady fountains. His conception of love unites all the voluptuousness of the

Oriental harem, and all the gallantry of the chivalric tournament with all the pure and quiet affection of an English fireside. His poetry reminds us of the miracles of Alpine scenery. Nooks and dells, beautiful as fairy-land, are embosomed in its most rugged and gigantic elevations. The roses and myrtles bloom unchilled on the verge of the avalanche.

Traces, indeed, of the peculiar character of Milton may be found in all his works; but it is most strongly displayed in the Sonnets. Those remarkable poems have been undervalued by critics who have not understood their nature. They have no epigrammatic point. There is none of the ingenuity of Filicaja in the thought, none of the hard and brilliant enamel of Petrarch in the style. They are simple but majestic records of the feelings of the poet; as little tricked out for the public eye as his diary would have been. A victory, an expected attack upon the city, a momentary fit of depression or exultation, a jest thrown out against one of his books, a dream which for a short time restored to him that beautiful face over which the grave had closed forever, led him to musings, which, without effort, shaped themselves into verse. The unity of sentiment and severity of style which characterize these little pieces remind us of the Greek Anthology, or perhaps still more of the Collects of the English Liturgy. The noble poem on the massacres of Piedmont is strictly a collect in verse.

The Sonnets are more or less striking, according as the occasions which gave birth to them are more or less interesting. But they are, almost without exception, dignified by a sobriety and greatness of mind to which we know not where to look for a parallel. It would, indeed, be scarcely safe to draw any decided inferences as to the character of a writer from passages directly egotistical. But the qualities which we have ascribed to Milton, though perhaps most strongly marked in those parts of his works which treat of his personal feelings, are distinguishable in every page, and impart to all his writings, prose and poetry, English, Latin, and Italian, a strong family likeness.

His public conduct was such as was to be expected from a man of spirit so high and of an intellect so powerful. He lived at one of the most memorable eras in the history of mankind, at the very crisis of the great conflict between Oromasdes and Arimanes, liberty and despotism, reason and prejudice. That great battle was fought for no single generation, for no single land. The destinies of the human race were staked on the same cast with the freedom of the English people. Then were first proclaimed those mighty principles which have since worked their way into the depths of the American forests, which have roused Greece from the slavery and degradation of two thousand years, and which, from one end of Europe to the other, have kindled

an unquenchable fire in the hearts of the oppressed, and loosed the knees of the oppressors with an unwonted fear.

Of those principles, then struggling for their infant existence, Milton was the most devoted and eloquent literary champion. We need not say how much we admire his public conduct. But we cannot disguise from ourselves that a large portion of his countrymen still think it unjustifiable. The civil war, indeed, has been more discussed, and is less understood, than any event in English history. The friends of liberty labored under the disadvantage of which the lion in the fable complained so bitterly. Though they were the conquerors, their enemies were the painters. As a body, the Roundheads had done their utmost to decry and ruin literature; and literature was even with them, as, in the long run, it always is with its enemies. The best book on their side of the question is the charming narrative of Mrs. Hutchinson. May's History of the Parliament is good; but it breaks off at the most interesting crisis of the struggle. The performance of Ludlow is foolish and violent; and most of the later writers who have espoused the same cause — Oldmixon, for instance, and Catherine Macaulay — have, to say the least, been more distinguished by zeal than either by candor or by skill. On the other side are the most authoritative and the most popular historical works in our language, that of

Clarendon, and that of Hume. The former is not only ably written and full of valuable information, but has also an air of dignity and sincerity which makes even the prejudices and errors with which it abounds respectable. Hume, from whose fascinating narrative the great mass of the reading public are still contented to take their opinions, hated religion so much that he hated liberty for having been allied with religion, and has pleaded the cause of tyranny with the dexterity of an advocate while affecting the impartiality of a judge.

The public conduct of Milton must be approved or condemned according as the resistance of the people to Charles the First shall appear to be justifiable or criminal. . . .

Every man who approves of the Revolution of 1688 [which dethroned James II., son of Charles I., on the ground that he "had broken the fundamental laws of the kingdom," and enthroned William of Orange in his stead], must hold that the breach of fundamental laws on the part of the sovereign justifies resistance. The question, then, is this: Had Charles the First broken the fundamental laws of England?

No person can answer in the negative, unless he refuses credit, not merely to all the accusations brought against Charles by his opponents, but to the narratives of the warmest Royalists, and to the confessions of the king himself. If there be any truth in any historian

of any party who has related the events of that reign, the conduct of Charles, from his accession to the meeting of the Long Parliament, had been a continued course of oppression and treachery. Let those who applaud the Revolution and condemn the Rebellion mention one act of James the Second to which a parallel is not to be found in the history of his father. Let them lay their fingers on a single article in the Declaration of Right, presented by the two Houses to William and Mary, which Charles is not acknowledged to have violated. He had, according to the testimony of his own friends, usurped the functions of the legislature, raised taxes without the consent of Parliament, and quartered troops on the people in the most illegal and vexatious manner. Not a single session of Parliament had passed without some unconstitutional attack on the freedom of debate; the right of petition was grossly violated; arbitrary judgments, exorbitant fines, and unwarranted imprisonments were grievances of daily occurrence. If these things do not justify resistance, the Revolution was treason; if they do, the Great Rebellion was laudable.

But, it is said, why not adopt milder measures? Why, after the king had consented to so many reforms, and renounced so many oppressive prerogatives, did the Parliament continue to rise in their demands at the risk of provoking a civil war? The ship-money had

been given up. The Star-chamber had been abolished. Provision had been made for the frequent convocation and secure deliberation of parliaments. Why not pursue an end confessedly good by peaceable and regular means? We recur again to the analogy of the Revolution. Why was James driven from the throne? Why was he not retained upon conditions? He too had offered to call a free parliament, and to submit to its decision all the matters in dispute. Yet we are in the habit of praising our forefathers, who preferred a revolution, a disputed succession, a dynasty of strangers, twenty years of foreign and intestine war, a standing army, and a national debt, to the rule, however restricted, of a tried and proved tyrant. The Long Parliament acted on the same principle, and is entitled to the same praise. They could not trust the king. He had, no doubt, passed salutary laws; but what assurance was there that he would not break them? He had renounced oppressive prerogatives; but where was the security that he would not resume them? The nation had to deal with a man whom no tie could bind, a man who made and broke promises with equal facility, a man whose honor had been a hundred times pawned, and never redeemed.

Here, indeed, the Long Parliament stands on still stronger ground than the Convention of 1688. No action of James can be compared to the conduct of

Charles with respect to the Petition of Right. The Lords and Commons present him with a bill in which the constitutional limits of his power are marked out. He hesitates; he evades; at last he bargains to give his assent for five subsidies. The bill receives his solemn assent; the subsidies are voted; but no sooner is the tyrant relieved than he returns at once to all the arbitrary measures which he had bound himself to abandon, and violates all the clauses of the very act which he had been paid to pass.

For more than ten years the people had seen the rights which were theirs by a double claim, by immemorial inheritance and by recent purchase, infringed by the perfidious king who had recognized them. At length circumstances compelled Charles to summon another Parliament; another chance was given to our fathers: were they to throw it away as they had thrown away the former? Were they again to be cozened by *le Roi le veut?* Were they again to advance their money on pledges which had been forfeited over and over again? Were they to lay a second Petition of Right at the foot of the throne, to grant another lavish aid in exchange for another unmeaning ceremony, and then to take their departure, till, after ten years more of fraud and oppression, their prince should again require a supply, and again repay it with a perjury? They were compelled to choose whether they

would trust a tyrant or conquer him. We think that they chose wisely and nobly.

The advocates of Charles, like the advocates of other malefactors against whom overwhelming evidence is produced, generally decline all controversy about the facts, and content themselves with calling testimony to character. He had so many private virtues! And had James the Second no private virtues? Was Oliver Cromwell, his bitterest enemies themselves being judges, destitute of private virtues? And what, after all, are the virtues ascribed to Charles? A religious zeal, not more sincere than that of his son, and fully as weak and narrow-minded, and a few of the ordinary household decencies which half the tombstones in England claim for those who lie beneath them. A good father! A good husband! Ample apologies indeed for fifteen years of persecution, tyranny, and falsehood!

We charge him with having broken his coronation oath; and we are told that he kept his marriage vow! We accuse him of having given up his people to the merciless inflictions of the most hot-headed and hard-hearted of prelates; and the defence is, that he took his little son on his knee and kissed him! We censure him for having violated the articles of the Petition of Right, after having, for good and valuable consideration, promised to observe them; and we are informed

that he was accustomed to hear prayers at six o'clock in the morning! It is to such considerations as these, together with his Vandyke dress, his handsome face, and his peaked beard, that he owes, we verily believe, most of his popularity with the present generation.

For ourselves, we own that we do not understand the common phrase, a good man, but a bad king. We can as easily conceive a good man and an unnatural father, or a good man and a treacherous friend. We cannot, in estimating the character of an individual, leave out of our consideration his conduct in the most important of all human relations; and if in that relation we find him to have been selfish, cruel, and deceitful, we shall take the liberty to call him a bad man, in spite of all his temperance at table, and all his regularity at chapel.

We cannot refrain from adding a few words respecting a topic on which the defenders of Charles are fond of dwelling. If, they say, he governed his people ill, he at least governed them after the example of his predecessors. If he violated their privileges, it was because their privileges had not been accurately defined. No act of oppression has ever been imputed to him which has not a parallel in the annals of the Tudors. This point Hume has labored, with an art which is as discreditable in a historical work as it would be admirable in a forensic address. The answer is short,

clear, and decisive. Charles had assented to the Petition of Right. He had renounced the oppressive powers said to have been exercised by his predecessors, and he had renounced them for money. He was not entitled to set up his antiquated claims against his own recent release.

These arguments are so obvious that it may seem superfluous to dwell upon them. But those who have observed how much the events of that time are misrepresented and misunderstood will not blame us for stating the case simply. It is a case of which the simplest statement is the strongest.

The enemies of the Parliament, indeed, rarely choose to take issue on the great points of the question. They content themselves with exposing some of the crimes and follies to which public commotions necessarily give birth. They bewail the unmerited fate of Strafford. They execrate the lawless violence of the army. They laugh at the Scriptural names of the preachers. Major-generals fleecing their districts; soldiers revelling on the spoils of a ruined peasantry; upstarts, enriched by the public plunder, taking possession of the hospitable firesides and hereditary trees of the old gentry; boys smashing the beautiful windows of cathedrals; Quakers riding naked through the market-place; Fifth-monarchy-men shouting for King Jesus; agitators lecturing from the tops of tubs on the fate of Agag;

all these, they tell us, were the offspring of the Great Rebellion.

Be it so. We are not careful to answer in this matter. These charges, were they infinitely more important, would not alter our opinion of an event which alone has made us to differ from the slaves who crouch beneath despotic sceptres. Many evils, no doubt, were produced by the civil war. They were the price of our liberty. Has the acquisition been worth the sacrifice? It is the nature of the devil of tyranny to tear and rend the body which he leaves. Are the miseries of continued possession less horrible than the struggles of the tremendous exorcism?

If it were possible that a people brought up under an intolerant and arbitrary system could subvert that system without acts of cruelty and folly, half the objections to despotic power would be removed. We should, in that case, be compelled to acknowledge that it at least produces no pernicious effects on the intellectual and moral character of a nation. We deplore the outrages which accompany revolutions. But the more violent the outrages, the more assured we feel that a revolution was necessary. The violence of these outrages will always be proportioned to the ferocity and ignorance of the people; and the ferocity and ignorance of the people will be proportioned to the oppression and degradation under which they have

been accustomed to live. Thus it was in our civil war. The heads of the Church and State reaped only that which they had sown. The Government had prohibited free discussion; it had done its best to keep the people unacquainted with their duties and their rights. The retribution was just and natural. If our rulers suffered from popular ignorance, it was because they had themselves taken away the key of knowledge. If they were assailed with blind fury, it was because they had exacted an equally blind submission.

It is the character of such revolutions that we always see the worst of them at first. Till men have been some time free, they know not how to use their freedom. The natives of wine countries are generally sober. In climates where wine is a rarity intemperance abounds A newly liberated people may be compared to a Northern army encamped on the Rhine or the Xeres. It is said that when soldiers in such a situation find themselves able to indulge without restraint in such a rare and expensive luxury, nothing is to be seen but intoxication. Soon, however, plenty teaches discretion; and, after wine has been for a few months their daily fare, they become more temperate than they had ever been in their own country. In the same manner, the final and permanent fruits of liberty are wisdom, moderation, and mercy. Its immediate effects are often atrocious crimes, conflicting errors, scepticism on points the most

clear, dogmatism on points the most mysterious. It is just at this crisis that its enemies love to exhibit it. They pull down the scaffolding from the half-finished edifice; they point to the flying dust, the falling bricks, the comfortless rooms, the frightful irregularity of the whole appearance; and then ask in scorn where the promised splendor and comfort is to be found. If such miserable sophisms were to prevail, there would never be a good house or a good government in the world.

Ariosto tells a pretty story of a fairy, who, by some mysterious law of her nature, was condemned to appear at certain seasons in the form of a foul and poisonous snake. Those who injured her during the period of her disguise were forever excluded from participation in the blessings which she bestowed. But to those who, in spite of her loathsome aspect, pitied and protected her, she afterwards revealed herself in the beautiful and celestial form which was natural to her, accompanied their steps, granted all their wishes, filled their houses with wealth, made them happy in love and victorious in war. Such a spirit is Liberty. At times she takes the form of a hateful reptile. She grovels, she hisses, she stings. But woe to those who in disgust shall venture to crush her! And happy are those who, having dared to receive her in her degraded and frightful shape, shall at length be rewarded by her in the time of her beauty and her glory!

There is only one cure for the evils which newly acquired freedom produces; and that cure is freedom. When a prisoner first leaves his cell he cannot bear the light of day; he is unable to discriminate colors or recognize faces. But the remedy is, not to remand him into his dungeon, but to accustom him to the rays of the sun. The blaze of truth and liberty may at first dazzle and bewilder nations which have become half-blind in the house of bondage. But let them gaze on, and they will soon be able to bear it. In a few years men learn to reason. The extreme violence of opinions subsides. Hostile theories correct each other. The scattered elements of truth cease to contend, and begin to coalesce; and at length a system of justice and order is educed out of the chaos.

Many politicians of our time are in the habit of laying it down as a self-evident proposition, that no people ought to be free till they are fit to use their freedom. The maxim is worthy of the fool in the old story, who resolved not to go into the water till he had learned to swim. If men are to wait for liberty till they become wise and good in slavery, they may indeed wait forever.

Therefore it is that we decidedly approve of the conduct of Milton and the other wise and good men who, in spite of much that was ridiculous and hateful in the conduct of their associates, stood by the cause of public

liberty. We are not aware that the poet has been charged with personal participation in any of the blamable excesses of that time. The favorite topic of his enemies is the line of conduct which he pursued with regard to the execution of the King. Of that celebrated proceeding we by no means approve. Still, we must say, in justice to the many eminent persons who concurred in it, and in justice, more particularly, to the eminent person who defended it, that nothing can be more absurd than the imputations which, for the last hundred and sixty years, it has been the fashion to cast upon the Regicides. . . .

We disapprove, we repeat, of the execution of Charles; not because the constitution exempts the king from responsibility, for we know that all such maxims, however excellent, have their exceptions; nor because we feel any peculiar interest in his character, for we think that his sentence describes him with perfect justice as "a tyrant, a traitor, a murderer, and a public enemy;" but because we are convinced that the measure was most injurious to the cause of freedom. He whom it removed was a captive and a hostage: his heir, to whom the allegiance of every Royalist was instantly transferred, was at large. The Presbyterians could never have been perfectly reconciled to the father: they had no such rooted enmity to the son. The great body of the people, also, contemplated that proceeding with

feelings which, however unreasonable, no government could safely venture to outrage.

But though we think the conduct of the Regicides blamable, that of Milton appears to us in a very different light. The deed was done. It could not be undone. The evil was incurred; and the object was to render it as small as possible. We censure the chiefs of the army for not yielding to the popular opinion; but we cannot censure Milton for wishing to change that opinion. The very feeling which would have restrained us from committing the act would have led us, after it had been committed, to defend it against the ravings of servility and superstition. For the sake of public liberty, we wish that the thing had not been done, while the people disapproved of it. But, for the sake of public liberty, we should also have wished the people to approve of it when it was done. . . .

We wish to add a few words relative to another subject on which the enemies of Milton delight to dwell, — his conduct during the administration of the Protector. That an enthusiastic votary of liberty should accept office under a military usurper seems, no doubt, at first sight, extraordinary. But all the circumstances in which the country was then placed were extraordinary. The ambition of Oliver was of no vulgar kind. He never seems to have coveted despotic power. He at first fought sincerely and manfully for the Parliament,

and never deserted it till it had deserted its duty. If he dissolved it by force, it was not till he found that the few members who remained after so many deaths, secessions, and expulsions, were desirous to appropriate to themselves a power which they held only in trust, and to inflict upon England the curse of a Venetian oligarchy. But even when thus placed by violence at the head of affairs, he did not assume unlimited power. He gave the country a constitution far more perfect than any which had at that time been known in the world. He reformed the representative system in a manner which has extorted praise even from Lord Clarendon. For himself he demanded indeed the first place in the commonwealth; but with powers scarcely so great as those of a Dutch stadtholder, or an American president. He gave the Parliament a voice in the appointment of ministers, and left to it the whole legislative authority, not even reserving to himself a veto on its enactments; and he did not require that the chief magistracy should be hereditary in his family. Thus far, we think, if the circumstances of the time and the opportunities which he had of aggrandizing himself be fairly considered, he will not lose by comparison with Washington or Bolivar. Had his moderation been met by corresponding moderation, there is no reason to think that he would have overstepped the line which he had traced for himself. But when he found that his parlia-

ments questioned the authority under which they met, and that he was in danger of being deprived of the restricted power which was absolutely necessary to his personal safety, then, it must be acknowledged, he adopted a more arbitrary policy.

Yet, though we believe that the intentions of Cromwell were at first honest, though we believe that he was driven from the noble course which he had marked out for himself by the almost irresistible force of circumstances, though we admire, in common with all men of all parties, the ability and energy of his splendid administration, we are not pleading for arbitrary and lawless power, even in his hands. We know that a good constitution is infinitely better than the best despot. But we suspect that, at the time of which we speak, the violence of religious and political enmities rendered a stable and happy settlement next to impossible. The choice lay, not between Cromwell and liberty, but between Cromwell and the Stuarts. That Milton chose well, no man can doubt who fairly compares the events of the protectorate with those of the thirty years which succeeded it, the darkest and most disgraceful in the English annals. Cromwell was evidently laying, though in an irregular manner, the foundations of an admirable system. Never before had religious liberty and the freedom of discussion been enjoyed in a greater degree. Never had the national honor been better upheld

abroad, or the seat of justice better filled at home. And it was rarely that any opposition which stopped short of open rebellion provoked the resentment of the liberal and magnanimous usurper. The institutions which he had established, as set down in the Instrument of Government, and the Humble Petition and Advice, were excellent. His practice, it is true, too often departed from the theory of these institutions. But had he lived a few years longer, it is probable that his institutions would have survived him, and that his arbitrary practice would have died with him. His power had not been consecrated by ancient prejudices. It was upheld only by his great personal qualities. Little, therefore, was to be dreaded from a second protector, unless he were also a second Oliver Cromwell. The events which followed his decease are the most complete vindication of those who exerted themselves to uphold his authority. His death dissolved the whole frame of society. The army rose against the Parliament, the different corps of the army against each other. Sect raved against sect. Party plotted against party. The Presbyterians, in their eagerness to be revenged on the Independents, sacrificed their own liberty, and deserted all their old principles. Without casting one glance on the past, or requiring one stipulation for the future, they threw down their freedom at the feet of the most frivolous and heartless of tyrants.

Then came those days, never to be recalled without a blush, the days of servitude without loyalty and sensuality without love, of dwarfish talents and gigantic vices, the paradise of cold hearts and narrow minds, the golden age of the coward, the bigot, and the slave. The King cringed to his rival that he might trample on his people, sank into a viceroy of France, and pocketed, with complacent infamy, her degrading insults and her more degrading gold. The caresses of harlots and the jests of buffoons regulated the policy of the State. The government had just ability enough to deceive, and just religion enough to persecute. The principles of liberty were the scoff of every grinning courtier, and the Anathema Maranatha of every fawning dean. In every high place, worship was paid to Charles and James, Belial and Moloch; and England propitiated those obscene and cruel idols with the blood of her best and bravest children. Crime succeeded to crime, and disgrace to disgrace, till the race accursed of God and man was a second time driven forth, to wander on the face of the earth, and to be a by-word and a shaking of the head to the nations.

Most of the remarks which we have hitherto made on the public character of Milton apply to him only as one of a large body. We shall proceed to notice some of the peculiarities which distinguished him from his contemporaries. And, for that purpose, it is necessary to

take a short survey of the parties into which the political world was at that time divided. We must premise that our observations are intended to apply only to those who adhered, from a sincere preference, to one or to the other side. In days of public commotion, every faction, like an Oriental army, is attended by a crowd of camp-followers, a useless and heartless rabble, who prowl round its line of march in the hope of picking up something under its protection, but desert it in the day of battle, and often join to exterminate it after a defeat. England, at the time of which we are treating, abounded with fickle and selfish politicians, who transferred their support to every government as it rose; who kissed the hand of the king in 1640, and spat in his face in 1649; who shouted with equal glee when Cromwell was inaugurated at Westminster Hall and when he was dug up to be hanged at Tyburn; who dined on calves' heads, or stuck up oak-branches, as circumstances altered, without the slightest shame or repugnance. These we leave out of the account. We take our estimate of parties from those who really deserve to be called partisans.

We would speak first of the Puritans, the most remarkable body of men, perhaps, which the world has ever produced. The odious and ridiculous parts of their character lie on the surface. He that runs may read them; nor have there been wanting attentive and

malicious observers to point them out. For many years after the Restoration they were the theme of unmeasured invective and derision. They were exposed to the utmost licentiousness of the press and of the stage, at the time when the press and the stage were most licentious. They were not men of letters; they were, as a body, unpopular; they could not defend themselves; and the public would not take them under its protection. They were therefore abandoned, without reserve, to the tender mercies of the satirists and dramatists. The ostentatious simplicity of their dress, their sour aspect, their nasal twang, their stiff posture, their long graces, their Hebrew names, the Scriptural phrases which they introduced on every occasion, their contempt of human learning, their detestation of polite amusements, were indeed fair game for the laughers. But it is not from the laughers alone that the philosophy of history is to be learned. And he who approaches this subject should carefully guard against the influence of that potent ridicule which has already misled so many excellent writers.

> "Ecco il fonte del riso, ed ecco il rio
> Che mortali perigli in se contiene:
> Hor qui tener a fren nostro desio,
> Ed esser cauti molto a noi conviene."

Those who roused the people to resistance; who directed their measures through a long series of

eventful years; who formed, out of the most unpromising materials, the finest army that Europe had ever seen; who trampled down King, Church, and Aristocracy; who, in the short intervals of domestic sedition and rebellion, made the name of England terrible to every nation on the face of the earth — were no vulgar fanatics. Most of their absurdities were mere external badges, like the signs of freemasonry or the dresses of friars. We regret that these badges were not more attractive. We regret that a body to whose courage and talents mankind has owed inestimable obligations had not the lofty elegance which distinguished some of the adherents of Charles the First, or the easy good-breeding for which the court of Charles the Second was celebrated. But, if we must make our choice, we shall, like Bassanio in the play, turn from the specious caskets which contain only the Death's head and the Fool's head, and fix on the plain leaden chest which conceals the treasure.

The Puritans were men whose minds had derived a peculiar character from the daily contemplation of superior beings and eternal interests. Not content with acknowledging, in general terms, an overruling Providence, they habitually ascribed every event to the will of the Great Being for whose power nothing was too vast, for whose inspection nothing was too minute. To know him, to serve him, to enjoy him,

was with them the great end of existence. They rejected with contempt the ceremonious homage which other sects substituted for the pure worship of the soul. Instead of catching occasional glimpses of the Deity through an obscuring veil, they aspired to gaze full on his intolerable brightness, and to commune with him face to face. Hence originated their contempt for terrestrial distinctions. The difference between the greatest and the meanest of mankind seemed to vanish when compared with the boundless interval which separated the whole race from him on whom their own eyes were constantly fixed. They recognized no title to superiority but his favor; and, confident of that favor, they despised all the accomplishments and all the dignities of the world. If they were unacquainted with the works of philosophers and poets, they were deeply read in the oracles of God. If their names were not found in the registers of heralds, they were recorded in the Book of Life. If their steps were not accompanied by a splendid train of menials, legions of ministering angels had charge over them. Their palaces were houses not made with hands; their diadems crowns of glory which should never fade away. On the rich and the eloquent, on nobles and priests, they looked down with contempt; for they esteemed themselves rich in a more precious treasure, and eloquent in a more sublime language, nobles by the right of an earlier

creation, and priests by the imposition of a mightier hand. The very meanest of them was a being to whose fate a mysterious and terrible importance belonged; on whose slightest action the spirits of light and darkness looked with anxious interest; who had been destined, before heaven and earth were created, to enjoy a felicity which should continue when heaven and earth should have passed away. Events which short-sighted politicians ascribed to earthly causes had been ordained on his account. For his sake empires had risen, and flourished, and decayed. For his sake the Almighty had proclaimed his will by the pen of the evangelist and the harp of the prophet. He had been wrested by no common deliverer from the grasp of no common foe. He had been ransomed by the sweat of no vulgar agony by the blood of no earthly sacrifice. It was for him that the sun had been darkened, that the rocks had been rent, that the dead had risen, that all nature had shuddered at the sufferings of her expiring God.

Thus the Puritan was made up of two different men, the one all self-abasement, penitence, gratitude, passion, the other proud, calm, inflexible, sagacious. He prostrated himself in the dust before his Maker; but he set his foot on the neck of his king. In his devotional retirement, he prayed with convulsions, and groans, and tears. He was half maddened by glorious or terrible illusions. He heard the lyres of angels or the tempting

whispers of fiends. He caught a gleam of the Beatific Vision, or woke screaming from dreams of everlasting fire. Like Vane, he thought himself intrusted with the sceptre of the millennial year. Like Fleetwood, he cried in the bitterness of his soul that God had hid his face from him. But when he took his seat in the council, or girt on his sword for war, these tempestuous workings of the soul had left no perceptible trace behind them. People who saw nothing of the godly but their uncouth visages, and heard nothing from them but their groans and their whining hymns, might laugh at them. But those had little reason to laugh who encountered them in the hall of debate or on the field of battle. These fanatics brought to civil and military affairs a coolness of judgment and an immutability of purpose which some writers have thought inconsistent with their religious zeal, but which were in fact the necessary effects of it. The intensity of their feelings on one subject made them tranquil on every other. One overpowering sentiment had subjected to itself pity and hatred, ambition and fear. Death had lost its terrors and pleasure its charms. They had their smiles and their tears, their raptures and their sorrows, but not for the things of this world. Enthusiasm had made them stoics, had cleared their minds from every vulgar passion and prejudice, and raised them above the influence of danger and of corruption. It sometimes might lead them to pursue unwise ends, but

never to choose unwise means. They went through the world, like Sir Artegal's iron man Talus with his flail, crushing and trampling down oppressors, mingling with human beings, but having neither part nor lot in human infirmities; insensible to fatigue, to pleasure, and to pain; not to be pierced by any weapon, not to be withstood by any barrier.

Such we believe to have been the character of the Puritans. We perceive the absurdity of their manners. We dislike the sullen gloom of their domestic habits. We acknowledge that the tone of their minds was often injured by straining after things too high for mortal reach; and we know that, in spite of their hatred of popery, they too often fell into the worst vices of that bad system, intolerance and extravagant austerity, that they had their anchorites and their crusades, their Dunstans and their De Montforts, their Dominics and their Escobars. Yet, when all circumstances are taken into consideration, we do not hesitate to pronounce them a brave, a wise, an honest, and a useful body.

The Puritans espoused the cause of civil liberty mainly because it was the cause of religion. There was another party, by no means numerous, but distinguished by learning and ability, which acted with them on very different principles. We speak of those whom Cromwell was accustomed to call the Heathens, men who were, in the phraseology of that time, doubting Thomases or

careless Gallios with regard to religious subjects, but passionate worshippers of freedom. Heated by the study of ancient literature, they set up their country as their idol, and proposed to themselves the heroes of Plutarch as their examples. They seem to have borne some resemblance to the Brissotines of the French Revolution. But it is not very easy to draw the line of distinction between them and their devout associates, whose tone and manner they sometimes found it convenient to affect, and sometimes, it is probable, imperceptibly adopted.

We now come to the Royalists. We shall attempt to speak of them, as we have spoken of their antagonists, with perfect candor. We shall not charge upon a whole party the profligacy and baseness of the horse-boys, gamblers, and bravoes, whom the hope of license and plunder attracted from the dens of Whitefriars to the standard of Charles, and who disgraced their associates by excesses which, under the stricter discipline of the Parliamentary armies, were never tolerated. We will select a more favorable specimen. Thinking as we do that the cause of the king was the cause of bigotry and tyranny, we yet cannot refrain from looking with complacency on the character of the honest old Cavaliers. We feel a national pride in comparing them with the instruments which the despots of other countries are compelled to employ, with the mutes who throng their

antechambers, and the Janizaries who mount guard at their gates. Our Royalist countrymen were not heartless, dangling courtiers, bowing at every step, and simpering at every word. They were not mere machines for destruction, dressed up in uniforms, caned into skill, intoxicated into valor, defending without love, destroying without hatred. There was a freedom in their subserviency, a nobleness in their very degradation. The sentiment of individual independence was strong within them. They were indeed misled, but by no base or selfish motive. Compassion and romantic honor, the prejudices of childhood, and the venerable names of history, threw over them a spell potent as that of Duessa; and, like the Red Cross Knight, they thought that they were doing battle for an injured beauty, while they defended a false and loathsome sorceress. In truth, they scarcely entered at all into the merits of the political question. It was not for a treacherous king or an intolerant church that they fought, but for the old banner which had waved in so many battles over the heads of their fathers, and for the altars at which they had received the hands of their brides. Though nothing could be more erroneous than their political opinions, they possessed, in a far greater degree than their adversaries, those qualities which are the grace of private life. With many of the vices of the Round Table, they had also many of its virtues, courtesy, generosity,

veracity, tenderness, and respect for women. They had far more both of profound and of polite learning than the Puritans. Their manners were more engaging, their tempers more amiable, their tastes more elegant, and their households more cheerful.

Milton did not strictly belong to any of the classes which we have described. He was not a Puritan. He was not a freethinker. He was not a Royalist. In his character the noblest qualities of every party were combined in harmonious union. From the Parliament and from the court, from the conventicle and from the Gothic cloister, from the gloomy and sepulchral circles of the Roundheads, and from the Christmas revel of the hospitable Cavalier, his nature selected and drew to itself whatever was great and good, while it rejected all the base and pernicious ingredients by which those finer elements were defiled. Like the Puritans, he lived

"As ever in his great taskmaster's eye."

Like them, he kept his mind continually fixed on the Almighty Judge and an eternal reward. And hence he acquired their contempt of external circumstances, their fortitude, their tranquillity, their inflexible resolution. But not the coolest sceptic or the most profane scoffer was more perfectly free from the contagion of their frantic delusions their savage manners, their ludicrous

jargon, their scorn of science, and their aversion to pleasure. Hating tyranny with a perfect hatred, he had nevertheless all the estimable and ornamental qualities which were almost entirely monopolized by the party of the tyrant. There was none who had a stronger sense of the value of literature, a finer relish for every elegant amusement, or a more chivalrous delicacy of honor and love. Though his opinions were democratic, his tastes and his associations were such as best harmonize with monarchy and aristocracy. He was under the influence of all the feelings by which the gallant Cavaliers were misled. But of those feelings he was the master, and not the slave. Like the hero of Homer, he enjoyed all the pleasures of fascination; but he was not fascinated. He listened to the song of the Sirens; yet he glided by without being seduced to their fatal shore. He tasted the cup of Circe; but he bore about him a sure antidote against the effects of its bewitching sweetness. The illusions which captivated his imagination never impaired his reasoning powers. The statesman was proof against the splendor, the solemnity, and the romance which enchanted the poet. Any person who will contrast the sentiments expressed in his treatises on Prelacy with the exquisite lines on ecclesiastical architecture and music in the Penseroso, which was published about the same time, will understand our meaning. This is an inconsistency which, more than anything

else, raises his character in our estimation, because it shows how many private tastes and feelings he sacrificed, in order to do what he considered his duty to mankind. It is the very struggle of the noble Othello. His heart relents; but his hand is firm. He does naught in hate, but all in honor. He kisses the beautiful deceiver before he destroys her.

That from which the public character of Milton derives its great and peculiar splendor still remains to be mentioned. If he exerted himself to overthrow a forsworn king and a persecuting hierarchy, he exerted himself in conjunction with others. But the glory of the battle which he fought for the species of freedom which is the most valuable, and which was then the least understood, the freedom of the human mind, is all his own. Thousands and tens of thousands among his contemporaries raised their voices against ship-money and the Star-chamber. But there were few indeed who discerned the more fearful evils of moral and intellectual slavery, and the benefits which would result from liberty of the press and the unfettered exercise of private judgment. These were the objects which Milton justly conceived to be the most important. He was desirous that the people should think for themselves as well as tax themselves, and should be emancipated from the dominion of prejudice as well as from that of Charles. He knew that those who, with the best intentions, over-

looked these schemes of reform, and contented themselves with pulling down the King and imprisoning the malignants, acted like the heedless brothers in his own poem, who, in their eagerness to disperse the train of the sorcerer, neglected the means of liberating the captive. They thought only of conquering when they should have thought of disenchanting.

> "Oh, ye mistook! Ye should have snatched his wand
> And bound him fast. Without the rod reversed,
> And backward mutters of dissevering power,
> We cannot free the lady that sits here
> Bound in strong fetters fixed and motionless."

To reverse the rod, to spell the charm backward, to break the ties which bound a stupefied people to the seat of enchantment, was the noble aim of Milton. To this all his public conduct was directed. For this he joined the Presbyterians; for this he forsook them. He fought their perilous battle; but he turned away with disdain from their insolent triumph. He saw that they, like those whom they had vanquished, were hostile to the liberty of thought. He therefore joined the Independents, and called upon Cromwell to break the secular chain, and to save free conscience from the paw of the Presbyterian wolf. With a view to the same great object, he attacked the licensing system, in that sublime treatise which every statesman should wear as

a sign upon his hand and as frontlets between his eyes. His attacks were, in general, directed less against particular abuses than against those deeply seated errors on which almost all abuses are founded, the servile worship of eminent men and the irrational dread of innovation.

That he might shake the foundations of these debasing sentiments more effectually, he always selected for himself the boldest literary services. He never came up in the rear, when the outworks had been carried and the breach entered. He pressed into the forlorn hope. At the beginning of the changes, he wrote with incomparable energy and eloquence against the bishops. But when his opinion seemed likely to prevail, he passed on to other subjects, and abandoned prelacy to the crowd of writers who now hastened to insult a falling party. There is no more hazardous enterprise than that of bearing the torch of truth into those dark and infected recesses in which no light has ever shone. But it was the choice and the pleasure of Milton to penetrate the noisome vapors, and to brave the terrible explosion. Those who most disapprove of his opinions must respect the hardihood with which he maintained them. He, in general, left to others the credit of expounding and defending the popular parts of his religious and political creed. He took his own stand upon those which the great body of his countrymen rep-

bated as criminal, or derided as paradoxical. He stood up for divorce and regicide. He attacked the prevailing systems of education. His radiant and beneficent career resembled that of the god of light and fertility.

> "Nitor in adversum; nec me, qui cætera, vincit
> Impetus, et rapido contrarius evehor orbi."

It is to be regretted that the prose writings of Milton should, in our time, be so little read. As compositions, they deserve the attention of every man who wishes to become acquainted with the full power of the English language. They abound with passages compared with which the finest declamations of Burke sink into insignificance. They are a perfect field of cloth of gold. The style is stiff with gorgeous embroidery. Not even in the earlier books of the Paradise Lost has the great poet ever risen higher than in those parts of his controversial works in which his feelings, excited by conflict, find a vent in bursts of devotional and lyrical rapture. It is, to borrow his own majestic language, "a sevenfold chorus of hallelujahs and harping symphonies."

We had intended to look more closely at these performances, to analyze the peculiarities of the diction, to dwell at some length on the sublime wisdom of the Areopagitica and the nervous rhetoric of the Iconoclast and to point out some of those magnificent passages

which occur in the Treatise of Reformation, and the Animadversions on the Remonstrant. But the length to which our remarks have already extended renders this impossible.

We must conclude. And yet we can scarcely tear ourselves away from the subject. The days immediately following the publication of this relic of Milton appear to be peculiarly set apart, and consecrated to his memory. And we shall scarcely be censured if, on this his festival, we be found lingering near his shrine, how worthless soever may be the offering which we bring to it. While this book lies on our table, we seem to be contemporaries of the writer. We are transported a hundred and fifty years back. We can almost fancy that we are visiting him in his small lodging; that we see him sitting at the old organ beneath the faded green hangings; that we can catch the quick twinkle of his eyes, rolling in vain to find the day; that we are reading in the lines of his noble countenance the proud and mournful history of his glory and his affliction. We imagine to ourselves the breathless silence in which we should listen to his slightest word, the passionate veneration with which we should kneel to kiss his hand and weep upon it, the earnestness with which we should endeavor to console him, if indeed such a spirit could need consolation, for the neglect of an age unworthy of his talents and his virtues, the

eagerness with which we should contest with his daughters, or with his Quaker friend Elwood, the privilege of reading Homer to him, or of taking down the immortal accents which flowed from his lips.

These are perhaps foolish feelings. Yet we cannot be ashamed of them; nor shall we be sorry if what we have written shall in any degree excite them in other minds. We are not much in the habit of idolizing either the living or the dead. And we think that there is no more certain indication of a weak and ill-regulated intellect than that propensity which, for want of a better name, we will venture to christen Boswellism. But there are a few characters which have stood the closest scrutiny and the severest tests, which have been tried in the furnace and have proved pure, which have been weighed in the balance and have not been found wanting, which have been declared sterling by the general consent of mankind, and which are visibly stamped with the image and superscription of the Most High. These great men we trust that we know how to prize; and of these was Milton. The sight of his books, the sound of his name, are pleasant to us. His thoughts resemble those celestial fruits and flowers which the Virgin Martyr of Massinger sent down from the gardens of Paradise to the earth, and which were distinguished from the productions of other soils, not only by superior bloom and sweetness, but by miraculous

efficacy to invigorate and to heal. They are powerful, not only to delight, but to elevate and purify. Nor do we envy the man who can study either the life or the writings of the great poet and patriot without aspiring to emulate, not indeed the sublime works with which his genius has enriched our literature, but the zeal with which he labored for the public good, the fortitude with which he endured every private calamity, the lofty disdain with which he looked down on temptations and dangers, the deadly hatred which he bore to bigots and tyrants, and the faith which he so sternly kept with his country and with his fame.

JOHANN WOLFGANG VON GOETHE

GERMANY'S GREATEST WRITER.

1749–1832

GOETHE.[1]

By FREDERIC HENRY HEDGE.

I. THE MAN.

GENIUS of the supreme order presupposes a nature of equal scope as the prime condition of its being. The Gardens of Adonis require little earth, but the oak will not flourish in a tub; and the wine of Tokay is the product of no green-house, nor gotten of sour grapes. Given a genuine great poet, you will find a greater man behind, in whom, among others, these virtues predominate, — courage, generosity, truth.

Pre-eminent among the poets of the modern world stands Goethe, chief of his own generation, challenging comparison with the greatest of all time. His literary activity embraces a span of nigh seventy years in a life of more than fourscore, beginning, significantly enough, with a poem on "Christ's Descent into Hell" (his earliest extant composition), and ending with Faust's — that is, Man's — ascent into heaven.

[1] From "Hours with the German Classics," by FREDERIC HENRY HEDGE (copyright by him in 1886). With permission of Messrs. LITTLE, BROWN, & Co., Publishers, Boston, Mass.

The rank of a writer — his spiritual import to human kind — may be inferred from the number and worth of the writings of which he has furnished the topic and occasion. "When kings build," says Schiller, speaking of Kant's commentators, "the draymen have plenty to do." Dante and Shakspeare have created whole libraries through the interest inspired by their writings. The Goethe-literature, so-called, — though scarce fifty years have elapsed since the poet's death, — already numbers its hundreds of volumes.

I note in this man, first of all, as a literary phenomenon, the unexampled fact of supreme excellence in several quite distinct provinces of literary action. Had we only his minor poems, he would rank as the first of lyrists. Had he written only "Faust," he would be the first of philosophic poets. Had he written only "Hermann and Dorothea," the sweetest idyllist; if only the "Märchen," the subtlest of allegorists. Had he written never a verse, but only prose, he would hold the highest place among the prose-writers of Germany. And lastly, had he written only on scientific subjects, in that line also — in the field of science — he would be, as he is, an acknowledged leader.

Noticeable in him also is the combination of extraordinary genius with extraordinary fortune. A magnificent person, a sound physique, inherited wealth, high social position, official dignity, with eighty-three years

of earthly existence, compose the framework of this illustrious life.

Behind the author, behind the poet, behind the world-renowned genius, a not unreasonable curiosity seeks the original man, the human individual, as he walked among men, his manner of being, his characteristics, as shown in the converse of life. In what soil grew the flowers and ripened the fruits which have been the delight and the aliment of nations? In proportion, of course, to the eminence attained by a writer, — in proportion to the worth of his works, to their hold on the world, — is the interest felt in his personality and behavior, in the incidents of his life. Unfortunately, our knowledge of the person is not always proportioned to the lustre of the name. Of the two great poets to whom the world's unrepealable verdict has assigned the foremost place in their several kinds, we know in one case absolutely nothing, and next to nothing in the other. To the question, Who sung the wrath of Achilles and the wanderings of the much-versed Odysseus? tradition answers with a name to which no faintest shadow of a person corresponds. To the question, Who composed "Hamlet" and "Othello"? history answers with a person so indistinct that recent speculation has dared to question the agency of Shakspeare in those creations. What would not the old scholiasts have given for satisfactory proofs of the existence of a Homer identical with

the author of the Iliad and the Odyssey? What would not the Shakspeare clubs give for one more authentic anecdote of the world's great dramatist?

Of Goethe we know more — I mean of his externals — than of any other writer of equal note. This is due in part to his wide relations, official and other, with his contemporaries; to his large correspondence with people of note, of which the documents have been preserved by the parties addressed; to the interest felt in him by curious observers living in the day of his greatness. It is due in part also to the fact that, unlike the greatest of his predecessors, he flourished in an all-communicating, all-recording age; and partly it is due to autobiographical notices, embracing important portions of his history.

Two seemingly opposite factors — limiting and qualifying the one the other — determined the course and topics of his life. One was the aim which he proposed to himself as the governing principle and purpose of his being, — to perfect himself, to make the most of the nature which God had given him; the other was a constitutional tendency to come out of himself, to lose himself in objects, especially in natural objects, so that in the study of nature — to which he devoted a large part of his life — he seems not so much a scientific observer as a chosen confidant, to whom the discerning Mother revealed her secrets.

In no greatest genius are all its talents self-derived.

Countless influences mould our intellect and mould our heart. One of these, and often one of the most potent, is heredity. Consciously or unconsciously, for good or for evil, physically and mentally, the father and mother are in the child, as indeed all his ancestors are in every man.

Of Goethe's father we know only what the son himself has told us in his memoirs. A man of austere presence, from whom Goethe, as he tells us, inherited his bodily stature and his serious treatment of life, —

"Vom Vater hab ich die Statur,
Des Lebens ernstes führen."

By profession a lawyer, but without practice, living in grim seclusion amid his books and collections; a man of solid acquirements and large culture, who had travelled in Italy and first awakened in Wolfgang the longing for that land; a man of ample means, inhabiting a stately mansion. For the rest, a stiff, narrow-minded, fussy pedant, with small toleration for any methods or aims but his own; who, while he appreciated the superior gifts of his son, was obstinately bent on guiding them in strict professional grooves, and teased him with the friction of opposing wills.

The opposite, in most respects, of this stately and pedantic worthy was the Frau Räthin, his youthful wife, young enough to have been his daughter, — a sound, exuberant nature, a woman to be loved; one

who blessed society with her presence, and possessed uncommon gifts of discourse. She was but eighteen when Wolfgang was born, — a companion to him and his sister Cornelia; one in whom they were sure to find sympathy and ready indulgence. Goethe was indebted to her, as he tells us, for his joyous spirit and his narrative talent, —

"Von Mütterchen die Frohnatur
Und Lust zu fabuliren."

Outside of the poet's household, the most important figure in the circle of his childish acquaintance was his mother's father, from whom he had his name, Johann Wolfgang Textor, the *Schultheiss*, or chief magistrate, of the city. From him Goethe seems to have inherited the superstition of which some curious examples are recorded in his life. He shared with Napoleon and other remarkable men, says Von Müller, the conceit that little mischances are prophetic of greater evils. On a journey to Baden-Baden with a friend, his carriage was upset and his companion slightly injured. He thought it a bad omen, and instead of proceeding to Baden-Baden chose another watering-place for his summer resort. If in his almanac there happened to be a blot on any date, he feared to undertake anything important on the day so marked. He had noted certain fatal days; one of these was the 22d of March. On that day he had lost a valued friend; on that day the theatre to which h

had devoted so much time and labor was burned; and on that day, curiously enough, he died. He believed in oracles; and as Rousseau threw stones at a tree to learn whether or no he was to be saved (the hitting or not hitting the tree was to be the sign), so Goethe tossed a valuable pocket-knife into the river Lahn to ascertain whether he would succeed as a painter. If behind the bushes which bordered the stream, he saw the knife plunge, it should signify success; if not, he would take it as an omen of failure. Rousseau was careful, he tells us, to choose a stout tree, and to stand very near. Goethe, more honest with himself, adopted no such precaution; the plunge of the knife was not seen, and the painter's career was abandoned.

Wordsworth's saying, "the child is the father of the man," — a saying which owes its vitality more to its form than its substance, — is not always verified, or its truth is not always apparent in the lives of distinguished men. I find not much in Goethe the child prophetic of Goethe the man. But the singer and the seeker, the two main tendencies of his being, are already apparent in early life. Of moral traits, the most conspicuous in the child is a power of self-control, — a moral heroism, which secured to him in after life a natural leadership unattainable by mere intellectual supremacy. An instance of this self-control is recorded among the anecdotes of his boyhood. At one of the lessons which he

shared with other boys, the teacher failed to appear. The young people awaited his coming for a while, but toward the close of the hour most of them departed, leaving behind three who were especially hostile to Goethe. "These," he says, "thought to torment, to mortify, and to drive me away. They left me a moment, and returned with rods taken from a broom which they had cut to pieces. I perceived their intention, and, supposing the expiration of the hour to be near, I immediately determined to make no resistance until the clock should strike. Unmercifully, thereupon, they began to scourge in the cruellest manner my legs and calves. I did not stir, but soon felt that I had miscalculated the time, and that such pain greatly lengthens the minutes." When the hour expired, his superior activity enabled him to master all three, and to pin them to the ground.

In later years the same zeal of self-discipline which prompted the child to exercise himself in bearing pain, impelled the man to resist and overcome constitutional weaknesses by force of will. A student of architecture, he conquered a tendency to giddiness by standing on pinnacles and walking on narrow rafters over perilous abysses. In like manner he overcame the ghostly terrors instilled in the nursery, by midnight visits to churchyards and uncanny places.

To real peril, to fear of death, he seems to have

had that native insensibility so notable always in men of genius, in whom the conviction of a higher destiny begets the feeling of a charmed life, — such as Plutarch records of the first Cæsar in peril of shipwreck on the river Anio. In the French campaign (1793), in which Goethe accompanied the Duke of Weimar against the armies of the Republic, a sudden impulse of scientific curiosity prompted him, in spite of warnings and remonstrances, to experiment on what is called the "cannon-fever." For this purpose he rode to a place in which he was exposed to a cross-fire of the two armies, and coolly watched the sensations experienced in that place of peril.

Command of himself, acquired by long and systematic discipline, gave him that command over others which he exercised in several memorable instances. Coming from a ball one night, — a young man fresh from the University, — he saw that a fire had broken out in the Judengasse, and that people were standing about helpless and confused without a leader; he immediately jumped from his carriage, and, full dressed as he was, in silk stockings and pumps, organized on the spot a fire-brigade, which averted a dangerous conflagration. On another occasion, voyaging in the Mediterranean, he quelled a mutiny on board an Italian ship, when captain and mates were powerless, and the vessel drifting on the rocks, by commanding sailors and passengers to

fall on their knees and pray to the Virgin, — adopting the idiom of their religion as well as their speech, of which he was a master.

As a student, first at Leipsic, then at Strasburg, including the years from 1766 to 1771, he seems not to have been a very diligent attendant on the lectures in either university, and to have profited little by professional instruction. In compliance with the wishes of his father, who intended him for a jurist, he gave some time to the study of the law; but on the whole the principal gain of those years was derived from intercourse with distinguished intellectual men and women, whose acquaintance he cultivated, and the large opportunities of social life.

In Strasburg occurred the famous love-passage with Friederike Brion, which terminated so unhappily at the time, and so fortunately in the end, for both.

Goethe has been blamed for not marrying Friederike. His real blame consists in the heedlessness with which, in the beginning of their acquaintance, he surrendered himself to the charm of her presence, thereby engaging her affection without a thought of the consequences to either. Besides the disillusion, which showed him, when he came fairly to face the question, that he did not love her sufficiently to justify marriage, there were circumstances — material, economical — which made it practically impossible. Her suffering in the separation,

great as it was, — so great indeed as to cause a dangerous attack of bodily disease, — could not outweigh the pangs which he endured in his penitent contemplation of the consequences of his folly.

The next five years were spent partly in Frankfort and partly in Wetzlar, partly in the forced exercise of his profession, but chiefly in literary labors and the use of the pencil, which for a time disputed with the pen the devotion of the poet-artist. They may be regarded as perhaps the most fruitful, certainly the most growing, years of his life. They gave birth to "Götz von Berlichingen" and the "Sorrows of Werther," to the first inception of "Faust," and to many of his sweetest lyrics. It was during this period that he made the acquaintance of Charlotte Buff, the heroine of the "Sorrows of Werther," from whom he finally tore himself away, leaving Wetzlar when he discovered that their growing interest in each other was endangering her relation with Kestner, her betrothed. In those years, also, he formed a matrimonial engagement with Elizabeth Schönemann (Lili), the rupture of which, I must think, was a real misfortune for the poet. It came about by no fault of his. Her family had from the first opposed themselves to the match on the ground of social disparity. For even in mercantile Frankfort rank was strongly marked; and the Goethes, though respectable people, were beneath the Schönemanns in

the social scale. Goethe's genius went for nothing with Madame Schönemann; she wanted for her daughter an aristocratic husband, not a literary one, — one who had wealth in possession, and not merely, as Goethe had, in prospect. How far Lili was influenced by her mother's and brother's representations it is impossible to say; however, she showed herself capricious, was sometimes cold, or seemed so to him, while favoring the advances of others. Goethe was convinced that she did not entertain for him that devoted love without which he felt that their union could not be a happy one. They separated; but on her death-bed she confessed to a friend that all she was, intellectually and morally, she owed to him.

In 1775 our poet was invited by the young Duke of Saxe-Weimar, Karl August, — whose acquaintance he had made at Frankfort and at Mentz, his junior by two or three years, — to establish himself in civil service at the Grand-Ducal Court. The father, who had other views for his son, and was not much inclined to trust in princes, objected; many wondered, some blamed. Goethe himself appears to have wavered with painful indecision, and at last to have followed a mysterious impulse rather than a clear conviction or deliberate choice. His Heidelberg friend and hostess sought still to detain him, when the last express from Weimar

drove up to the door. To her he replied in the words of his own Egmont: —

"Say no more! Goaded by invisible spirits, the sun-steeds of time run away with the light chariot of our destiny; there is nothing for it but to keep our courage, hold tight the reins, and guide the wheels now right, now left, avoiding a stone here, a fall there. Whither away? Who knows? Scarcely one remembers whence he came."

It does not appear that he ever repented this most decisive step of his life-journey, nor does there appear to have been any reason why he should. A position, an office of some kind, he needs must have. Even now, the life of a writer by profession, with no function but that of literary composition, is seldom a prosperous one; in Goethe's day, when literature was far less remunerative than it is in ours, it was seldom practicable. Unless he had chosen to be maintained by his father, some employment besides that of book-making was an imperative necessity. The alternative of that which was offered — the one his father would have chosen — was that of a plodding jurist in a country where forensic pleading was unknown, and where the lawyer's profession offered no scope for any of the higher talents with which Goethe was endowed. On the whole, it was a happy chance that called him to the little capital of the little Grand-Duchy of Saxe-Weimar. If the State was one of petty dimensions

(a kind of pocket-kingdom, like so many of the principalities of Germany), it nevertheless included some of the fairest localities, and one at least of the most memorable in Europe, — the Wartburg, where Luther translated the Bible, where Saint Elizabeth dispensed the blessings of her life, where the Minnesingers are said to have held their poetic tournament, —

> "Heinrich von Ofterdingen,
> Wolfram von Eschenbach."

It included also the University of Jena, which at that time numbered some of the foremost men of Germany among its professors. It was a miniature State and a miniature town; one wonders that Goethe, who would have shone the foremost star in Berlin or Vienna, could content himself with so narrow a field. But Vienna and Berlin did not call him until it was too late, — until patronage was needless; and Weimar did. A miniature State, — but so much the greater his power and freedom and the opportunity of beneficent action.

No prince was ever more concerned to promote in every way the welfare of his subjects than Karl August; and in all his works undertaken for this purpose, Goethe was his foremost counsellor and aid. The most important were either suggested by him or executed under his direction. Had he never written a poem, or given to the world a single literary composition, he would still have led, as a Weimar official, a useful and benefi-

cent life. But the knowledge of the world and of business, the social and other experience gained in this way, was precisely the training which he needed, — and which every poet needs, — for the broadening and deepening and perfection of his art. Friedrich von Müller, in his valuable treatise of "Goethe as a Man of Affairs," tells us how he traversed every portion of the country to learn what advantage might be taken of topographical peculiarities, what provision made for local necessities. "Everywhere — on hilltops crowned with primeval forests, in the depths of gorges and shafts — Nature met her favorite with friendly advances, and revealed to him many a desired secret." Whatever was privately gained in this way was applied to public uses. He endeavored to infuse new life into the mining business, and to make himself familiar with all its technical requirements. For that end he revived his chemical experiments. New roads were built, hydraulic operations were conducted on more scientific principles, fertile meadows were won from the river Saale by systematic drainage, and in many a struggle with Nature an intelligently persistent will obtained the victory.

Nor was it with material obstacles only that the poet-minister had to contend. In the exercise of the powers intrusted to him he often encountered the fierce opposition of party interest and stubborn prejudice, and was sometimes driven to heroic and despotic meas-

ures in order to accomplish a desired result, — as when he foiled the machinations of the Jena professors in his determination to save the University library, and when, in spite of the opposition of the leading burghers, he demolished the city wall.

In 1786 Goethe was enabled to realize his cherished dream of a journey to Italy. There he spent a year and a half in the diligent study and admiring enjoyment of the treasures of art which made that country then, even more than now, the mark and desire of the civilized world. He came back an altered man. Intellectually and morally he had made in that brief space, under new influences, a prodigious stride. His sudden advance while they had remained stationary separated him from his contemporaries. The old associations of the Weimar world, which still revolved its little round, the much-enlightened traveller had outgrown. People thought him cold and reserved. It was only that the gay, impulsive youth had ripened into an earnest, sedate man. He found Germany jubilant over Schiller's "Robbers" and other writings representative of the "storm-and-stress" school, which his maturity had left far behind, his own contributions to which he had come to hate. Schiller, who first made his acquaintance at this time, writes to Körner: —

"I doubt that we shall ever become intimate. Much that to me is still of great interest he has already outlived.

He is so far beyond me, not so much in years as in experience and culture, that we can never come together in one course."

How greatly Schiller erred in the supposition that they never could become intimate, how close the intimacy which grew up between them, what harmony of sentiment, how friendly and mutually helpful their co-operation, is sufficiently notorious.

But such was the first aspect which Goethe presented to strangers at this period of his life; he rather repelled than attracted, until nearer acquaintance learned rightly to interpret the man, and intellectual or moral affinity bridged the chasm which seemed to divide him from his kind. In part, too, the distance and reserve of which people complained was a necessary measure of self-defence against the disturbing importunities of social life. "From Rome," says Friedrich von Müller, "from the midst of the richest and grandest life, dates the stern maxim of 'Renunciation' which governed his subsequent being and doing, and which furnished his only guarantee of mental equipoise and peace."

His literary works hitherto had been spasmodic and lawless effusions, the escapes of a gushing, turbulent youth. In Rome he had learned the sacred significance of art. The consciousness of his true vocation had been awakened in him; and to that, on the eve of his for-

tieth year, he thenceforth solemnly devoted the remainder of his life. He obtained release from the more onerous of his official engagements, retaining only such functions as accorded with his proper calling as a man of letters and of science. He renounced his daily intercourse with Frau von Stein, though still retaining and manifesting his unabated friendship for the woman to whom in former years he had devoted so large a portion of his time, and employed himself in giving forth those immortal words which have settled forever his place among the stars of first magnitude in the intellectual world.

Noticeable and often noted was the charm and (when arrived to maturity) the grand effect of his personal presence. Physical beauty is not the stated accompaniment, nor even the presumable adjunct, of intellectual greatness. In Goethe, as perhaps in no other, the two were combined. A wondrous presence! — on this point the voices are one and the witnesses many. "Goethe was with us," so writes Heinse to one of his friends; 'a beautiful youth of twenty-five, full of genius and force from the crown of his head to the sole of his foot; a heart full of feeling, a spirit full of fire, who with eagle wings *ruit immensus ore profundo.*" Jacobi writes: "The more I think of it, the more impossible it seems to me to communicate to any one who has not seen Goethe any conception of this extraordinary crea-

ture of God." Lavater says: "Unspeakably sweet, an indescribable appearance, the most terrible and lovable of men." Hufeland, the chief medical celebrity of Germany, describes his appearance in early manhood: "Never shall I forget the impression which he made as 'Orestes' in Greek costume. You thought you beheld an Apollo. Never was seen in any man such union of physical and spiritual perfection and beauty as at that time in Goethe." More remarkable still is the testimony of Wieland, who had reason to be offended, having been before their acquaintance the subject of Goethe's sharp satire. But immediately at their first meeting, sitting at table "by the side," he says, "of this glorious youth, I was radically cured of all my vexation. . . . Since this morning," he wrote to Jacobi, "my soul is as full of Goethe as a dewdrop is of the morning sun." And to Zimmermann: "He is in every respect the greatest, best, most splendid human being that ever God created." Goethe was then twenty-six. Henry Crabbe Robinson, who saw him at the age of fifty-two, reports him one of the most "oppressively handsome" men he had ever seen, and speaks particularly as all who have described him speak, of his wonderfully brilliant eyes. Those eyes, we are told, had lost nothing of their lustre, nor his head its natural covering, at the age of eighty.

Among the heroic qualities notable in Goethe, I

reckon his faithful and unflagging industry. Here was a man who took pains with himself, — *liess sich's sauer werden*, — and made the most of himself. He speaks of wasting, while a student in Leipsic, "the beautiful time;" and certainly neither at Leipsic nor afterward at Strasburg did he toil as his Wagner in "Faust" would have done. But he was always learning. In the lecture-room or out of it, with pen and books or gay companions, he was taking in, to give forth again in dramatic or philosophic form the world of his experience.

A frolicsome youth may leave something to regret in the way of time misspent; but Goethe the man was no dawdler, no easy-going Epicurean. On the whole, he made the most of himself, and stands before the world a notable instance of a complete life. He would do the work which was given him to do. He would not die till the second part of "Faust" was brought to its predetermined close. By sheer force of will he lived till that work was done. Smitten at fourscore by the death of his son, and by deaths all around, he kept to his task. "The idea of duty alone sustains me; the spirit is willing, the flesh must." When "Faust" was finished, the strain relaxed. "My remaining days," he said, "I may consider a free gift; it matters little what I do now, or whether I do anything." And six months later he died.

A complete life! A life of strenuous toil! At home and abroad, — in Italy and Sicily, at Ilmenau and Carlsbad, as in his study at Weimar, — with eye or pen or speech, he was always at work. A man of rigid habits; no lolling or lounging. "He showed me," says Eckermann, "an elegant easy-chair which he had bought to-day at auction. 'But,' said he, 'I shall never or rarely use it; all indolent habits are against my nature. You see in my chamber no sofa; I sit always in my old wooden chair, and never, till a few weeks ago, have permitted even a leaning place for my head to be added. If surrounded by tasteful furniture, my thoughts are arrested; I am placed in an agreeable but passive state. Unless we are accustomed to them from early youth, splendid chambers and elegant furniture had better be left to people without thoughts.'" This in his eighty-second year!

A widely diffused prejudice regarding the personal character of Goethe refuses to credit him with any moral worth accordant with his bodily and mental gifts. It figures him a libertine, — heartless, loveless, bad. I do not envy the mental condition of those who can rest in the belief that a really great poet can be a bad man. Be assured that the fruits of genius have never grown, and will never grow, in such a soil. Of all great poets Byron might seem at first glance to constitute an exception to this — I venture to call it —

law of Nature. Yet hear what Walter Scott, a sufficient judge, said of Byron: —

"The errors of Lord Byron arose neither from depravity of heart — for nature had not committed the anomaly of uniting to such extraordinary talents an imperfect moral sense — nor from feelings dead to the admiration of virtue. No man had ever a kinder heart for sympathy, or a more open hand for the relief of distress; and no mind was ever more formed for enthusiastic admiration of noble actions."

The case of Goethe requires no appeal to general principles. It only requires that the charges against him be fairly investigated; that he be tried by documentary evidence, and by the testimony of competent witnesses. The mistake is made of confusing breaches of conventional decorum with essential depravity.

That Goethe was faulty in many ways may be freely conceded. But surely there is a wide difference between not being faultless and being definitely bad. To call a man bad is to say that the evil in him preponderates over the good. In the case of Goethe the balance was greatly the other way. It has been said that he abused the confidence reposed in him by women; that he encouraged affection which he did not reciprocate for artistic purposes. The charge is utterly groundless; and in the case of Bettine has been refuted by irrefragable proof. To say that he was wanting in love, heartless, cold, is ridiculously false. Yet the charge is

constantly reiterated in the face of facts, — reiterated with undoubting assurance and a certain complacency which seems to say, "Thank God! we are not as this man was." There is a satisfaction which some people feel in *spotting* their man, — Burns drank; Coleridge took opium; Byron was a rake; Goethe was cold: by these marks we know them. The poet found it necessary, as I have said, in later years, under social pressure, for the sake of the work which was given him to do, to fortify himself with a mail of reserve. And this, indeed, contrasted strangely with his former *abandon*, and with the customary gush of German sentimentality. It was common then for Germans who had known each other by report, and were mutually attracted, when first they met, to fall on each other's necks and kiss and weep. Goethe, as a young man, had indulged such fervors; but in old age he had lost this effusiveness, or saw fit to restrain himself outwardly, while his kindly nature still glowed with its pristine fires. He wrote to Frau von Stein, "I may truly say that my innermost condition does not correspond to my outward behavior." Hence the charge of coldness. Say that Mount Ætna is cold: do we not see the snow on its sides?

But he was unpatriotic; he occupied himself with poetry, and did not cry out while his country was in the death-throes — so it seemed — of the struggle with France! But what should he have done? What *could*

he have done? What would his single arm or declamation have availed? No man more than Goethe longed for the rehabilitation of Germany. In his own way he wrought for that end; he could work effectually in no other. That enigmatical composition, — the "Märchen," — according to the latest interpretation, indicates how, in Goethe's view, that end was to be accomplished. To one who considers the relation of ideas to events, it will not seem extravagant when I say that to Goethe, more than to any one individual, Germany is indebted for her emancipation, independence, and present political regeneration.[1]

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[1] [The following interpretation of the "Märchen" is condensed from a later portion of this essay, and used here as a foot-note for the light it throws upon Goethe's political career.]

In the summer of 1795 Goethe composed for Schiller's new magazine, "Die Horen," a prose poem known in German literature as *Das Märchen*, — "*The* Tale;" as if it were the only one, or the one which more than another deserves that appellation. . . .

Goethe gave this essay to the public as a riddle which would probably be unintelligible at the time, but which might perhaps find an interpreter after many days, when the hints contained in it should be verified. Since its first appearance commentators have exercised their ingenuity upon it, perceiving it to be allegorical, but until recently without success. . . . I follow Dr. Herman's Baumgart's lead in the exposition which I now offer.

"The Tale" is a prophetic vision of the destinies of Germany, — an allegorical foreshowing at the close of the eighteenth century of what Germany was yet to become, and has in great part already become. A position is predicted for her like that which she occupied from the time of Charles the Great to the time of Charles V., — a period during which the Holy Roman Empire of Germany was the leading secular power in Western Europe. That time had gone by. Since the middle of the sixteenth century Germany had declined, and at the date of

It is true, his writings contain no declamations against tyrants, and no tirades in favor of liberty. He believed that oppression existed only through ignorance and blindness, and these he was all his life long seeking to remove. He believed that true liberty is attainable only through mental illumination, and that he was all his life long seeking to promote.

He was no agitator, no revolutionist; he had no faith in violent measures. Human welfare, he judged, is not to be advanced in that way; is less dependent on forms of polity than on the life within. But if the test of patriotism is the service rendered to one's country, who more patriotic than he? Lucky for us and the world that he persisted to serve her in his own way, and not as the agitators claimed that he should. It was clear to him then, and must be clear to us now, that he

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this writing (1795) had nearly reached her darkest day. Disintegrated, torn by conflicting interests, pecked by petty rival princes, despairing of her own future, it seemed impossible that she should ever again become a power among the nations. Goethe felt this; he felt it as profoundly as any German of his day . . . and he characteristically went into himself and studied the situation. The result was this wonderful composition, — "Das Märchen." He perceived that Germany must die to be born again. She did die, and is born again. He had the sagacity to foresee the dissolution of the Holy Roman Empire, — an event which took place eleven years later, in 1806. The Empire is figured by the composite statue of the fourth King in the subterranean Temple, which crumbles to pieces when that Temple, representing Germany's past, emerges and stands above ground by the River. The resurrection of the Temple and its stand by the River is the *dénouement* of the Tale. And that signifies, allegorically, the rehabilitation of Germany.

could not have been what they demanded, and at the same time have given to his country and the world what he did.

As a courtier and favorite of Fortune, it was inevitable that Goethe should have enemies. They have done what they could to blacken his name; and to this day the shadow they have cast upon it in part remains. But of this be sure, that no selfish, loveless egoist could have had and retained such friends. The man whom the saintly Fräulein von Klettenberg chose for her friend, whom clear-sighted, stern-judging Herder declared that he loved as he did his own soul; the man whose thoughtful kindness is celebrated by Herder's incomparable wife, whom Karl August and the Duchess Luise cherished as a brother; the man whom children everywhere welcomed as their ready playfellow and sure ally, of whom pious Jung Stilling lamented that admirers of Goethe's genius knew so little of the goodness of his heart, — can this have been a bad man, heartless, cold?

II. THE WRITER.

I HAVE said that to Goethe, above all writers, belongs the distinction of having excelled, not experimented merely, — that, others have also done, — but excelled in many distinct kinds. To the lyrist he added the dramatist, to the dramatist the novelist, to the novelist the mystic seer, and to all these the naturalist and scientific

discoverer. The history of literature exhibits no other instance in which a great poet has supplemented his proper orbit with so wide an epicyle.

In poetry, as in science, the ground of his activity was a passionate love of Nature, which dates from his boyhood. At the age of fifteen, recovering from a sickness caused by disappointment in a boyish affair of the heart, he betook himself with his sketch-book to the woods. "In the farthest depth of the forest," he says, "I sought out a solemn spot, where ancient oaks and beeches formed a shady retreat. A slight declivity of the soil made the merit of the ancient boles more conspicuous. This space was inclosed by a thicket of bushes, between which peeped moss-covered rocks, mighty and venerable, affording a rapid fall to an affluent brook."

The sketches made of these objects at that early age could have had no artistic value, although the methodical father was careful to mount and preserve them. But what the pencil, had it been the pencil of the greatest master, could never glean from scenes like these, what art could never grasp, what words can never formulate, the heart of the boy then imbibed, assimilated, resolved in his innermost being. There awoke in him then those mysterious feelings, those unutterable yearnings, that pensive joy in the contemplation of Nature, which leavened all his subsequent

life, and the influence of which is so perceptible in his poetry, especially in his lyrics. . . .

The first literary venture by which Goethe became widely known was "Götz von Berlichingen," a dramatic picture of the sixteenth century, in which the principal figure is a predatory noble of that name. A dramatic picture, but not in any true sense a play, it owed its popularity at the time partly to the truth of its portraitures, partly to its choice of a native subject and the truly German feeling which pervades it. It was a new departure in German literature, and perplexed the critics as much as it delighted the general public. It anticipated by a quarter of a century what is technically called the Romantic School.

"Götz von Berlichingen" was soon followed by the "Sorrows of Werther," — one of those books which on their first appearance have taken the world by storm, and of which Mrs. Stowe's "Uncle Tom's Cabin" is the latest example. It is a curious circumstance that a great poet should have won his first laurels by prose composition. Sir Walter Scott eclipsed the splendor of his poems by the popularity of the Waverley novels. Goethe eclipsed the world-wide popularity of his "Werther" by the splendor of his poems.

Of one who was great in so many kinds, it may seem difficult to decide in what department he most excelled.

Without undertaking to measure and compare what is incommensurable, I hold that Goethe's genius is essentially lyrical. Whatever else may be claimed for him, he is, first of all, and chiefly, a singer. Deepest in his nature, the most innate of all his faculties, was the faculty of song, of rhythmical utterance. The first to manifest itself in childhood, it was still active at the age of fourscore. The lyrical portions of the second part of "Faust," some of which were written a short time before his death, are as spirited, the versification as easy, the rhythm as perfect, as the songs of his youth.

As a lyrist he is unsurpassed, I venture to say unequalled, if we take into view the whole wide range of his performance in this kind, — from the ballads, the best-known of his smaller poems, and those light fugitive pieces, those bursts of song which came to him without effort, and with such a rush that in order to arrest and preserve them he seized, as he tells us, the first scrap of paper that came to hand and wrote upon it diagonally, if it happened so to lie on his table, lest, through the delay of selecting and placing, the inspiration should be checked and the poem evaporate, — from these to such stately compositions as the "Zueignung," or dedication of his poems, the "Weltseele" and the "Orphic Sayings," — in short, from poetry that writes itself, that springs spontaneously in the mind, to poetry

that is written with elaborate art. There is this distinction, and it is one of the most marked in lyric verse. Compare in English poetry, by way of illustration, the snatches of song in Shakspeare's plays with Shakspeare's sonnets; compare Burns with Gray; compare Jean Ingelow with Browning.

Goethe's ballads have an undying popularity; they have been translated, and most of them are familiar to English readers. . . .

In the Elegies written after his return from Italy, the author figures as a classic poet inspired by the Latin Muse. The choicest of these elegies — the "Alexis and Dora" — is not so much an imitation of the ancients as it is the manifestation of a side of the poet's nature which he had in common with the ancients. He wrote as a Greek or Roman might write, because he felt his subject as a Greek or Roman might feel it.

"Hermann und Dorothea," which Schiller pronounced the acme not only of Goethean but of all modern art, was written professedly as an attempt in the Homeric[1] style, motived by Wolf's "Prolegomena" and Voss's "Luise." It is Homeric only in its circumstantiality, in the repetition of the same epithets applied to the same persons, and in the Greek realism of Goethe's nature. The theme is very un-Homeric; it is thoroughly modern and German, —

[1] "Doch Homeride zu sein, auch noch als letzter, ist schön."

"Germans themselves I present, to the humbler dwelling I lead you,
Where with Nature as guide man is natural still." [1]

This exquisite poem has been translated into English hexameters with great fidelity by Miss Ellen Frothingham.

"Iphigenie auf Tauris" handles a Greek theme, exhibits Greek characters, and was hailed on its first appearance as a genuine echo of the Greek drama. Mr. Lewes denies it that character; and certainly it is not Greek, but Christian, in sentiment. It differs from the extant drama of Euripides, who treats the same subject, in the Christian feeling which determines its *dénouement*. . . .

A large portion of Goethe's productions have taken the dramatic form; yet he cannot be said, theatrically speaking, to have been, like Schiller, a successful dramatist. His plays, with the exception of "Egmont" and the First Part of "Faust," have not commanded the stage; they form no part, I believe, of the stock of any German theatre. The characterizations are striking, but the positions are not dramatic. Single scenes in some of them are exceptions, — like that in "Egmont," where Clara endeavors to rouse her fellow-citizens to the rescue of the Count, while Brackenburg seeks to restrain her, and several of the scenes in the First Part of

[1] From the Elegy entitled "Hermann und Dorothea."

"Faust." But, on the whole, the interest of Goethe's dramas is psychological rather than scenic. Especially is this the case with "Tasso," one of the author's noblest works, where the characters are not so much actors as metaphysical portraitures. Schiller, in his plays, had always the stage in view. Goethe, on the contrary, wrote for readers, or cultivated, reflective hearers, not spectators. . . . .

When I say, then, that Goethe, compared with Schiller, failed of dramatic success, I mean that his talent did not lie in the line of plays adapted to the stage as it is; or if the talent was not wanting, his taste did not incline to such performance. He was no playwright.

But there is another and higher sense of the word *dramatic*, where Goethe is supreme, — the sense in which Dante's great poem is called *Commedia*, a play. There is a drama whose scope is beyond the compass of any earthly stage, — a drama not for theatre-goers, to be seen on the boards, but for intellectual contemplation of men and angels. Such a drama is "Faust," of which I shall speak hereafter.

Of Goethe's prose works, — I mean works of prose fiction, — the most considerable are two philosophical novels, "Wilhelm Meister" and the "Elective Affinities."

In the first of these the various and complex motives which have shaped the composition may be comprehended in the one word *education*, — the education

of life for the business of life. The main thread of the narrative traces through a labyrinth of loosely connected scenes and events the growth of the hero's character, — a progressive training by various influences, passional, intellectual, social, moral, and religious. These are represented by the *personnel* of the story. In accordance with this design, the hero himself, if so he may be called, has no pronounced traits, is more negative than positive, but is brought into contact with many very positive characters. His life is the stage on which these characters perform. A ground is thus provided for the numerous portraits of which the author's large experience furnished the originals, and for lessons of practical wisdom derived from his close observation of men and things and his lifelong reflection thereon.

"Wilhelm Meister," if not the most artistic, is the most instructive, and in that view, next to "Faust," the most important, of Goethe's works. In it he has embodied his philosophy of life, — a philosophy far enough removed from the epicurean views which ignorance has ascribed to him, — a philosophy which is best described by the term *ascetic*. Its keynote is Renunciation. "With renunciation begins the true life," was the author's favorite maxim; and the second part of "Wilhelm Meister" — the *Wanderjahre* — bears the collateral title *Die Entsagenden;* that is, the "Renouncing" or the "Self-denying." The characters that figure in

this second part — most of whom have had their training in the first — form a society whose principle of union is self-renunciation and a life of beneficent activity. . . .

The most fascinating character in "Wilhelm Meister" — the wonder and delight of the reader — is Mignon, the child-woman, — a pure creation of Goethe's genius, without a prototype in literature. Readers of Scott will remember Fenella, the elfish maiden in "Peveril of the Peak." Scott says in his Preface to that novel: "The character of Fenella, which from its peculiarity made a favorable impression on the public, was far from being original. The fine sketch of Mignon in Wilhelm Meister's *Lehrjahre* — a celebrated work from the pen of Goethe — gave the idea of such a being. But the copy will be found to be greatly different from my great prototype; nor can I be accused of borrowing anything save the general idea."

As I remember Fenella, the resemblance to Mignon is merely superficial. A certain weirdness is all they have in common. The intensity of the inner life, the unspeakable longing, the cry of the unsatisfied heart, the devout aspiration, the presentiment of the heavenly life which characterize Mignon are peculiar to her; they constitute her individuality. Wilhelm has found her a kidnapped child attached to a strolling circus company, and has rescued her from the cruel hands of the manager.

Thenceforth she clings to him with a passionate devotion, in which gratitude for her deliverance, filial affection, and the love of a maiden for her hero are strangely blended. Afflicted with a disease of the heart, she is subject to terrible convulsions, which increase the tenderness of her protector for the doomed child. After one of these attacks, in which she had been suffering frightful pain, we read: —

"He held her fast. She wept; and no tongue can express the force of those tears. Her long hair had become unfastened and hung loose over her shoulders. Her whole being seemed to be melting away. . . . At last she raised herself up. A mild cheerfulness gleamed from her face. 'My father!' she cried, 'you will not leave me! You will be my father! I will be your child.' Softly, before the door, a harp began to sound. The old Harper was bringing his heartiest songs as an evening sacrifice to his friend."

Then bursts on the reader that world-famed song, in which the soul of Mignon, with its unconquerable yearnings, is forever embalmed, — "Kennst du das Land": —

"Know'st thou the land that bears the citron's bloom?
The golden orange glows 'mid verdant gloom,
A gentle wind from heaven's deep azure blows,
The myrtle low, and high the laurel grows, —
Know'st thou the land?[1]
Oh, there! oh, there!
Would I with thee, my best beloved, repair" . . .

[1] Literally, "Know'st thou it well?" But the word "well," in this case, does not answer to the German *wohl*.

The "Elective Affinities" has been strangely misinterpreted as having an immoral tendency, as encouraging conjugal infidelity, and approving "free love." That any one who has read the work with attention to the end could so misjudge it seems incredible. Precisely the reverse of this, its aim is to enforce the sanctity of the nuptial bond by showing the tragic consequences resulting from its violation, though only in thought and feeling. . . .

Here, a word concerning one merit of Goethe which seems to me not to have been sufficiently appreciated by even his admirers, — his loving skill in the delineation of female character; the commanding place he assigns to woman in his writings; his full recognition of the importance of feminine influence in human destiny. The prophetic utterance, which forms the conclusion of "Faust," — "The ever womanly draws us on," — is the summing up of Goethe's own experience of life. Few men had ever such wide opportunities of acquaintance with women. If, on the one hand, his loves had revealed to him the passional side of feminine nature, he had enjoyed, on the other, the friendship of some of the purest and noblest of womankind. Conspicuous among these are Fräulein von Klettenberg and the Duchess Luise, whom no one, says Lewes, ever speaks of but in terms of veneration. No poet but Shakspeare, and scarcely Shakspeare, has set before the world so

rich a gallery of female portraits. They range from the lowest to the highest, — from the wanton to the saint; they are drawn in firm lines, and limned in imperishable colors, . . . each bearing the stamp of her own individuality, and each confessing a master's hand. These may be considered as representing different phases of the poet's experience, — different *stadia* in his view of life. "The ever womanly draws us on." So Goethe, of all men most susceptible of feminine influence, was led by it from weakness to strength, from dissipation to concentration, from doubt to clearness, from tumult to repose, from the earthly to the heavenly.

"FAUST."

Goethe appears to have derived his knowledge of the Faust legend partly from the work of Widmann, published in 1599,[1] partly from another more modern in its form, which appeared in 1728, and partly from the puppet plays exhibited in Frankfort and other cities of Germany, of which that legend was then a favorite theme. He was not the only writer of that day who made use of it. Some thirty of his contemporaries had produced their "Fausts" during the interval which elapsed between the inception and publication of his great work. Oblivion overtook them all, with the ex-

[1] The earlier work of Spiess (1588) was translated into English and furnished Marlowe with the subject-matter of his "Dr. Faustus."

ception of Lessing's, of which a few fragments are left; the manuscript of the complete work was unaccountably lost on its way to the publisher, between Dresden and Leipsic.

The composition of "Faust," as we learn from Goethe's biography, proceeded spasmodically, with many and long interruptions between the inception and conclusion. Projected in 1769 at the age of twenty, it was not completed till the year 1831, at the age of eighty-two.

But the effect of the long arrest, which after Goethe's removal to Weimar delayed the completion of the "Faust," is most apparent in the wide gulf which separates, as to character and style, the Second Part from the First. So great, indeed, is the distance between the two that, without external historical proofs of identity, it would seem from internal evidence altogether improbable, in spite of the slender thread of the fable which connects them, that both poems were the work of one and the same author. And really the author was not the same. The change which had come over Goethe on his return from Italy had gone down to the very springs of his intellectual life. The fervor and the rush, the sparkle and foam of his early productions, had been replaced by the stately calm and the luminous breadth of view that is born of experience. The torrent of the mountains had become the river

of the plain; romantic impetuosity had changed to classic repose. He could still, by occasional efforts of the will, cast himself back into the old moods, resume the old thread, and so complete the first "Faust." But we may confidently assert that he could not, after the age of forty, have originated the poem, any more than before his Italian tour he could have written the second "Faust," purporting to be a continuation of the first. The difference in spirit and style is enormous.

As to the question which of the two is the greater production, it is like asking which is the greater, Dante's "Commedia" or Shakspeare's "Macbeth"? They are incommensurable. As to which is the more generally interesting, no question can arise. There are thousands who enjoy and admire the First Part to one who even reads the Second. The interest of the former is poetic and thoroughly human; the interest of the other is partly poetic, but mostly philosophic and scientific. . . .

The symbolical character of "Faust" is assumed by all the critics, and in part confessed by the author himself. Besides the general symbolism pervading and motiving the whole, — a symbolism of human destiny, — and here and there a shadowing forth of the poet's private experience, there are special allusions — local, personal, enigmatic conceits — which have furnished

topics of learned discussion and taxed the ingenuity of numerous commentators. We need not trouble ourselves with these subtleties. But little exegesis is needed for a right comprehension of the true and substantial import of the work.

The key to the plot is given in the Prologue in Heaven. The devil, in the character of Mephistopheles, asks permission to tempt Faust; he boasts his ability to get entire possession of his soul and drag him down to hell. The Lord grants the permission, and prophesies the failure of the attempt: —

"Be it allowed! Draw this spirit from its Source if you can lay hold of him; bear him with you on your downward path, and stand ashamed when you are forced to confess that a good man in his dark strivings has a consciousness of the right way."

Here we have a hint of the author's design. He does not intend that the devil shall succeed; he does not mean to adopt the conclusion of the legend and send Faust to hell. He had the penetration to see, and he meant to show, that the notion implied in the old popular superstition of selling one's soul to the devil — the notion that evil can obtain the entire and final possession of the soul — is a fallacy; that the soul is not man's to dispose of, and cannot be so traded away. We are the soul's, not the soul ours. Evil is self-limited; the good in man must finally prevail. So long as he

strives he is not lost; Heaven will come to the aid of his better nature. This is the doctrine, the philosophy, of "Faust." In the First Part, stung by disappointment in his search of knowledge, by failure to lay hold of the superhuman, and urged on by his baser propensities personified in Mephistopheles, Faust abandons himself to sensual pleasure, — seduces innocence, burdens his soul with heavy guilt, and seems to be entirely given over to evil. This Part ends with Mephistopheles' imperious call, — "Her zu mir," — as if secure of his victim. Before the appearance of the Second Part, the reader was at liberty to accept that conclusion. But in the Second Part Faust gradually wakes from the intoxication of passion, outgrows the dominion of appetite, plans great and useful works, whereby Mephistopheles loses more and more his hold of him; and after his death is baffled in his attempt to appropriate Faust's immortal part, to which the heavenly Powers assert their right. . . .

The character of Margaret is unique; its duplicate is not to be found in all the picture galleries of fiction. Shakspeare, in the wide range of his feminine *personnel*, has no portrait like this. A girl of low birth and vulgar circumstance, imbued with the ideas and habits of her class, speaking the language of that class from which she never for a moment deviates into finer phrase, takes on, through the magic handling of the

poet, an ideal beauty. Externally common and prosaic in all her ways, she is yet thoroughly poetic, transfigured in our conception by her perfect love. To that love, unreasoning, unsuspecting, — to the excess of that which in itself is no fault, but beautiful and good, — her fall and ruin are due. Her story is the tragedy of her sex in all time. As Schlegel said of the "Prometheus Bound," — "It is not a single tragedy, but tragedy itself." . . .

[The First Part ends with the prison scene, where poor Margaret, escaping by death, ascends to heaven, while Mephistopheles, shouting an imperious "Hither to me!" disappears with Faust.] The reader is allowed to suppose — and most readers did suppose — that the author meant it should be inferred that the devil had secured his victim, and that Faust, according to the legend, had paid the forfeit of his soul to the powers of hell.

But Faust reappears in a new poem, — the Second Part. He is there introduced sleeping, as if burying in torpor the lusts and crimes and sorrows of his past career. Pitying spirits are about him, to heal his woes and promote his return to a better life. . . .

[At the end of his hundred years of earthly life,] Mephistopheles . . . fails to secure the immortal part of Faust, which the angels appropriate and bear aloft:

> "This member of the upper spheres
> We rescue from the devil;

For whoso strives and perseveres
May be redeemed from evil."

The last two lines may be supposed to contain the author's justification of Mephistopheles' defeat and Faust's salvation. Though a man surrender himself to evil, if there is that in him which evil cannot satisfy, an impulse by which he outgrows the gratifications of vice, extends his horizon and lifts his desires, pursues an onward course until he learns to place his aims outside of himself, and to seek satisfaction in works of public utility, — he is beyond the power of Satan: he may be redeemed from evil.

One could wish, indeed, that more decisive marks of moral development had been exhibited in the latter stages of Faust's career. But here comes in the Christian doctrine of Grace, which Goethe applies to the problem of man's destiny. Faust is represented as saved by no merit of his own, but by the interest which Heaven has in every soul in which there is the possibility of a heavenly life.

And so the new-born ascending spirit is committed by the Mater gloriosa to the tutelage of Gretchen [Margaret], — *una pœnitentium*, — now purified from all the stains of her earthly life, to whom is given the injunction: —

"Lift thyself up to higher spheres!
When he divines, he 'll follow thee."

And the Mystic Choir chants the epilogue which embodies the moral of the play:—

"All that is perishing
Types the ideal;
Dream of our cherishing
Thus becomes real.
Superhumanly
Here it is done;
The ever womanly
Draweth us on."

ALFRED (LORD) TENNYSON.

THE SPIRIT OF MODERN POETRY.

1809–1892.

ALFRED (LORD) TENNYSON.

THE SPIRIT OF MODERN POETRY.

By G. MERCER ADAM.

OF Tennyson what can one write freshly to-day that will not seem but an echo of what has been said or written of England's noble singer who, on the death of Wordsworth, now over half a century ago, assumed the official bays of the English laureateship? Personal homage, of course, one can pay to the illustrious name, so dear to the heart of the English-speaking race; but how freshly or vitally can any writer now speak of that magnificent body of his verse which is the glory of his age, of the nobility and knightly virtues of its author's character, of the splendor of his genius, or of the breadth of intellectual and spiritual interests which was so signally manifested in all that Tennyson thought and wrote? Among the "Beacon Lights" in the present series of volumes the Laureate of the age has not hitherto been included, and to fill the gap the writer of this sketch has ventured, not, of course, to say all that might be said of the great

poet, but modestly to deal with the man and his art, so that neither his era nor his work shall go unchronicled or fail of some recognition, however inadequate, in these pages.

Tennyson's supreme excellence, it is admitted, lies not so much in his themes as in his transcendent art. It is this that has given him his hold upon a cultured age and won for him immortality. His work is the perfection of literary form, and, in his lyrical pieces especially, his melody is exquisite. Not less masterly is his power of construction, while his sensibility to beauty is phenomenal. His secluded life brought him close to nature's heart and made him familiar with her every voice and mood. In interpreting these, much of the charm lies in the fidelity of his descriptions and in the surpassing beauty of the word-painting. In the Shakespearian sense he lacked the dramatic faculty, and he had but slender gifts of invention and creation. But broad, if not always strong, was his intelligence and keen his interest in the problems of the time. Though living apart from the world, he was yet of it; and in many of his poems may be traced not only the doings, but the thought and tendencies, of his age. His Christianity, though undogmatic, was real and pervasive, and his love for nature was a devotion. In national affairs, as befitted the official singer of his

country (witness his fine 'Ode on the Death of the Duke of Wellington'), he showed himself the historic as well as the modern Englishman, and great was his reverence for law and freedom. Attractive also, if at times somewhat commonplace, is the quiet domestic sphere which Tennyson has hallowed in the many modern idylls which depict the joys and sorrows of humble life. No trait in the poet's many-sided character is more beautiful than the sympathy he has manifested in these poems with the world's toilers; while nothing could well be more touching than the pathos with which he invests their simple annals.

Typical of the Victorian age in which he lived, Tennyson is also representative of its highest thought and culture. This is seen not only in the thought of his verse, but in its splendid forms, and especially in the technical equipment of the poet. In his dialogues there is much movement and action, and he had consummate skill in the handling of metres. Few poets have approached him in the successful writing of blank verse, which has a delightful cadence as well as calm strength. Above all his gifts, he was an artist in words, his ear being most sensitively attuned and his taste pure and refined for the delicate artistry of the poet's work. In this respect he is a matchless literary workman. Besides the music of his verse, his thought is ever high, and in his serious moods consecrated to

noble and reverent purposes. In the midst of the negations and convulsive movements of his day his spirit is always serene, and his thought, while at times dreamily melancholy, is conserving and full of faith's highest assurance. His sympathy with his fellow-man was keen and wide-souled; and though he stood aloof from the conflict and struggle of his day, he was far from indifferent to its movements, and with high purpose strove if not to direct at least to reflect them. This was specially characteristic of the man, and in the conflict with doubt no poet has more keenly interpreted the mental struggles of the thoughtful soul and the deep underlying spirit of his time, or more beneficently given the age an assured ground of faith while conserving its highest and dearest hopes. Happily, too, unlike many poets, his own character was lofty and blameless, and hence his message comes with more consistency, as well as with a higher inspiration and power. Nor is the message the less impressive for the note of honest doubt which finds utterance in many a poem, or for the intimation of a creed that is at once liberal and conservative. With the evidences before the reader that the poet himself had had his own soul-wrestlings and periods of mental conflict, his counsellings of courage and faith are all the more effective, as they are in unison with his belief in the upward progress of the race, and his unshaken trust in a higher Power.

Lacking in intensity of passion and dramatic force, Tennyson here again is but typical of his era, to him one of reposeful content and calm, reasoning progress. Of permanent, lasting value much of his verse undoubtedly is, but not all of it will escape the indifference of posterity or the measuring-rod and censure, it may be, of the future critic. He had not the stirring strains or the careless rapture of other and earlier poets of the motherland, — his characteristic is more contemplative and brooding, — yet his range is unusually comprehensive and his power varied and sustained, as well as marked by the highest qualities of rhythmic beauty. In the idyll, where he specially shines, we have much that is lovely and limpid, with abounding instances of that felicitous word-painting for which he was noted. This is especially seen in the simple pastoral idylls, such as 'Dora,' 'The May Queen,' and 'The Miller's Daughter,' or in those tender lyrics such as 'Mariana,' 'Sir Galahad,' 'The Dying Swan,' and 'The Talking Oak.' In the ballads and songs, how felicitous again is the poet's work, and how rich yet mellifluous is the strain! Had Tennyson written nothing else but these, with the verse included in the volumes issued by him in 1832 and 1842, how high would he have been placed in the choir of song, and how supreme should we have deemed his art! In "The Princess" alone there are songs that would have made any poet's reputation,

while for music and color, and especially for perfection of poetic workmanship, they are almost matchless in their beauty.

Fortunately, however, the poet was to give us much even beyond these surpassingly beautiful things, and make a more unique and distinctive contribution to the verse of his era. In the years that followed the production of his early writings the poet matures in thought as his art ripens and reaches still higher qualities of craftsmanship. Recluse as he was, he moreover had his experiences of life and drank deeply of sorrow's cup, as we see in "In Memoriam," — that noble tribute to his youthful friend, Arthur Hallam, with its grand hymnal qualities and powerful and reverent lessons for an age shifting in its beliefs and unconfirmed in its faith. In later work from his pen we also see the Laureate — for he has now received official recognition from his nation — in his relations to the culture as well as to the thought of his time, keeping pace with the age in all its complex engrossments and problems. This is shown in much and varied work turned out with its author's loving interest in the poetic art, and with characteristic delicacy and finish. The most important labor of this later time includes "The Princess," "Maud and Other Poems," "Enoch Arden," the dramas "Becket," "Queen Mary," and "Harold," "Tiresias," "Demeter," "The Foresters," but above all, and most

notably that grand epic of King Arthur's time, — "The Idylls of the King." In the latter, the most characteristic, and perhaps the most permanent, of Tennyson's work, the poet manifests his historic sense and love for England's legendary past, and achieves his design not only to glorify it, but to imbue it with a deep ethical motive and underlying purpose, the expression of his own chivalrous, knightly soul and strenuous, thoughtful, and blameless life. In these splendid tales of knight-errantry we have the full flower of the poet's genius, narrated in the true romantic spirit, but with an ideality and imagination quite Tennysonian, and with a spiritualistic touch in harmony with "the voice of the age" that reminds us that, —

> "Our little systems have their day;
> They have their day and cease to be:
> They are but broken lights of thee,
> And thou, O Lord, art more than they."

It is with such themes and speculations that Tennyson has powerfully and impressively influenced his age. Beyond and above the mere artistry of the poet, we recognize his interest in man's higher, spiritual being, his love for nature, and awe in contemplating the heights and depths of infinite time and space, ever looking upward and inward at the mysteries of the world behind the phenomena of sense. It is difficult, in set theological terms, to define the poet's creed, though we know

that he was won by the Broad Church teaching of his friends, Frederick Robertson and Denison Maurice, and had himself many a battle to fight with honest doubts until — as his 'Crossing the Bar' shows us — he finally conquered and laid them. But while there is an absence of definite doctrine in his work there is no question about his religious convictions or of his belief in the eternal verities, the immanence of God in man and the universe. Throughout his poems he assumes the existence of a great Spirit and recognizes that our souls are a part of Him, however Faith at times seems to veil her face from the poet, and all appears a mystery, though a mystery presided over by infinite Power and Love. The great problems of metaphysics and of man's origin and destiny, we are told, occupied much of his thought, and he dwelt upon them with eager, intense interest, and touched upon them with great candor, earnestness, and truthfulness. No sophistry could shake his belief in man's immortality, for without belief in this doctrine the human race, he was convinced, had not incentive enough to virtue, while all man's inspirations were otherwise meaningless. For the doctrine of Evolution, in its materialistic aspect, he had nothing but scorn, though he accepted it in the more spiritual guise with which Russel Wallace propounded it. If we come from the brutes we are nevertheless linked with the Divine, he believed, and it was the

Divine in man that was to conquer the brute within him, and, in the upward struggle, work out salvation. So, in the realm of physical science, on the principles of which, as Huxley tells us, he had a great grasp, the poet, while appalled by the mystery, accepts and indeed rejoices in its truths, though he cannot acquiesce in a godless world or in the denial of a life to come, in which the race, through infinite love, shall be brought into union with God.

But leaving here Tennyson's speculations and beliefs, — a most interesting part of the poet's analytical and reflective character, — let us look for a little at the man personally, and record briefly the chief incidents in his quiet though ideal home-life. To those who know the Memoir by his son, Hallam Tennyson, — a memoir that while paying honor to filial reverence and devotion is at the same time and in all respects most worthy of its high theme, — the events in the poet's life will hardly need dwelling upon, though they throw much light on, and impart the distinction of a high dignity to, the Laureate's work. The life Hallam Tennyson describes was, we know, not lived in the public eye, and was wholly without sensational elements or any of the vapid interests which usually attach to a man whose name is, in a special sense, public property, and about whom the world was eagerly, and often officiously, curious. The life the poet lived, in a popular sense, lacked all that

usually attracts the masses, for he was personally little known to his generation, rarely seen among large gatherings of the people, and, great Englishman as he was, was almost a stranger, in his later years at least, in the English metropolis, or, if we except the seats of the universities, in any of the chief towns of the kingdom. And yet, in another and a higher sense, the century has hardly known among its many intellectual forces one that has been more influential in its effect upon literary art, or in certain directions has more potently influenced the ideals and more profoundly given expression to the ethical and philosophic thought of the time. Secluded as his life was, it was one not of obscurity or of mere asceticism; on the contrary, it was rich in all the elements that make for a great reputation, and ever devoted to strenuous, elevating purpose, and to an ideal poetic career.

So far as his tastes and opportunity offered, Tennyson's life, moreover, was enriched by many wise and noble friendships, and by intimacy with not a few of the best and most thoughtful minds of his age. It was spent, we rejoice to think also, in unceasing toil in and for his high art, with a resulting productiveness which proved the extent and varied range of his labors as well as the mastery of his craft.

Until the appearance of the biography referred to, we had known the Laureate almost wholly through his

books. Now, thanks to the authoritative record of his accomplished surviving son, we know the poet as he lived, and feel that behind his writings there is a personality of the most interesting and impressive kind. It is a personality such as consorts with the opinions which most thoughtful readers of Tennyson's writings must have had of one of the greatest and serenest minds of the age, — a poet who, aside from the splendor of his workmanship and the beauty and melody of his verse, has greatly enriched the poetic literature of the century, and has, we feel, given profound thought to the intellectual problems and spiritual aspirations of his era. Nor does the Memoir, as a revelation of the poet's intellectual and personal life, fall away, on any page of it, from the high plane on which it has been prepared and written. There is no undue invasion, which a son's pride might be apt to make, of domestic privacy, and no dealing with irrelevant topics or elaboration of those set forth with becoming modesty and restraint; far less is there the discussion of any subject, for a trivial or vain purpose. Throughout the work we meet with no unnecessary lifting of veils or treatment of themes merely to satisfy morbid curiosity. Everywhere there is the evidence of sound judgment, unimpeachable taste, and a wholesome sanity. This is especially the case in the frank revelation of the poet's views on religion and his attitude towards scientific and theological thought, to

which we have ourselves referred. In this respect, a large debt is due to the biographer for setting before the reader, not only the high ethical purpose which Tennyson had in view in selecting the themes of his poems and in the mode of handling them, but, as we have said, in showing us what beyond peradventure were his religious opinions, and, despite a certain curtaining of gloom, how profoundly he was influenced by faith in the Divine life. Nor is the least interest in the Memoir to be found in the light the biographer throws on the poet's writings as a whole — how they were conceived and elaborated, and on the often hidden meaning that underlies some of the most thoughtful verse. This, to students of the Laureate's writings, is of high value, in addition to the service rendered by the biographer in tracing in his father's poetic work the influences which fashioned it and the pains he took to give it its marvellous beauty and artistic finish of expression.

It is this instructive as well as skilled and dignified treatment, with the vast literary and deep personal interest in the life, that will commend the Memoir to all who are proud of the Laureate's fame, and wished to have nothing written that was unworthy of either the poet or the man, or that would in the least detract from his laurels. Nor does the restraint which the biographer imposes upon himself conceal from us the man in his human aspects, or lead him to set before the

reader an imaginary, rather than a veritable and real, portraiture. We have a picture, it is true, of an almost ideal domestic life, and of a man of rare gifts and fine culture, whose work and career have been and are the pride and glory of the English-speaking race. But we have also the story of an author not free from human weaknesses, and though endowed with manifold and great gifts, yet who had to labor long and earnestly to perfect himself in his art, and in his early years had much discouragement and not a little adversity to contend with. With all the toil and stress his early years had known, when success came to the poet no one was less unspoiled by it; and when sunshine fell upon and gilded his life, maturing years brought him serenity, happiness, and, at length, peace.

Alfred Tennyson was born at his father's rectory, Somersby, Lincolnshire, August 6, 1809. He was the fourth of twelve children, seven of whom were sons, two of them, Frederick and Charles, being endowed, like Alfred, with poetic gifts. The poet's mother, a woman of sweet and tender disposition, had much to do in moulding the future Laureate's character; while from his father, a man of fine culture, he received not only much of his education, but his bent towards a recluse, bookish career. Alfred was from his earliest days a retired, shy child, fond of reading and given to

rhyming, and with a characteristic love of nature and of quiet rural life. Later on he had a passion for the sea-coast, and for those scenes of storm and stress about the seagirt shores of old England which he was so feelingly and with such poetic beauty to depict in "Sea Dreams," and in those incomparable songs, embodiments at once of sorrow and of faith, 'Break, break, break,' and 'Crossing the Bar.' Besides the education he received from his scholarly father, and at a school at Louth for four years, young Tennyson spent some years at Trinity College, Cambridge, where, though he did not take a degree, he won in 1829 the Chancellor's medal for the best English poem of the year, the subject of which was 'Timbuctoo.' At college he had the good fortune to number among his friends several men who later in life were, like himself, to rise to eminence, — such as Henry Alford (afterwards Dean of Canterbury), R. C. Trench (later an archbishop of Dublin), C. Merivale (historian and Dean of Ely), Monckton Milnes (Lord Houghton), James Spedding (editor of Lord Bacon's Works), Macaulay, Thackeray, and, most endeared of all, Arthur Henry Hallam, son of the historian, whose memory Tennyson has immortalized in "In Memoriam." With him at college was also his brother Charles, one year his senior, with whom he collaborated in the collection of verse, issued in 1827, under the title of "Poems by Two Brothers." In 1830.

Tennyson made a journey to the Pyrenees with Arthur Hallam, who was engaged to the poet's sister Emilia, and in the same year he published an independent volume, entitled "Poems chiefly Lyrical." In this, his first venture alone in poetry, and in another issued in 1832, Tennyson was to manifest to the world his poetic powers and art, for they contained, besides much rhythmical and contemplative verse, such poems as 'Mariana,' 'Claribel,' 'Lilian,' 'Lady Clare,' 'The Lotus Eaters,' 'A Dream of Fair Women,' 'The May Queen,' and 'The Miller's Daughter.' In spite of the great promise bodied forth in these works, the volumes were subject to not a little unfavorable criticism, which stayed his further publishing for a period of ten years, though not the furtherance of his creative work, nor his enthusiastic efforts towards increasing the perfection of his art.

It was not until 1842 that the poet again appeared in print, this time with a volume to which he appended his name, "Poems by Alfred Tennyson," and which gave him high rank among the acknowledged singers of his day, — Wordsworth, Southey, Landor, Campbell, Rogers, and Leigh Hunt, in England; and in the New World, Longfellow, Bryant, Lowell, Whittier, and Emerson. The poet-contemporaries of his youth — Byron, Scott, Coleridge, Shelley, and Keats — had by this time all died, and in 1843 Southey died, when

Wordsworth, whom Tennyson reverenced, became Poet Laureate. The gap occasioned by the death of these early English poets of the century was now to be filled in large measure by Tennyson, though among the writers of song to arise were the Brownings, Rossetti, Matthew Arnold, and Swinburne. Critical appreciation of the volume of 1842 was happily encouraging to the poet; indeed, it was most gratifying, for its many remarkable beauties were now justly and adequately appraised, particularly such fine new themes as the volume contained — 'Ulysses,' 'Godiva,' 'The Two Voices,' 'The Talking Oak,' 'Œnone,' 'Locksley Hall,' 'The Vision of Sin,' and 'Morte D'Arthur,' the germ of the future "Idylls of the King." Nor on this side the Atlantic did the new volume lack substantial recognition, and from such competent critics as Emerson and Hawthorne; while among his English contemporaries Tennyson became, if we except for the time Wordsworth, the acknowledged head of English song. At this period the poet resided in London or its neighborhood, his family home in Lincolnshire having been broken up in 1837, six years after the death of his father. Here, in spite of the secluded life he led, he became a notable figure in literary circles, and greatly increased the range of his friends, correspondents, and admirers. Among the latter were the Carlyles, Thomas and his clever wife Jane being especially drawn to the

poet, and to them we owe interesting sketches of the personal appearance of Tennyson at this time. Mrs. Carlyle, in one of her delightful letters gossiping about Dickens, Bulwer-Lytton, and Tennyson, esteems the latter "the greatest genius of the three," adding that "besides, he is a very handsome man, and a noble-hearted one, with something of the gypsy in his appearance, which for me is perfectly charming." This is the historian, her husband's, piece of portraiture: "A fine, large-featured, dim-eyed, bronze-colored, shaggy-headed man, dusty, smoky, free-and-easy; who swims, outwardly and inwardly, with great composure in an articulate element as of tranquil chaos and tobacco smoke; great now and t ıen when he does emerge; a most restful, brotherly, solid-hearted man." Another portrait we have from the Chelsea philosopher and scorner of shams which describes the poet very humanly as "one of the finest-looking men in the world, with a great shock of rough, dusky, dark hair; bright, laughing, hazel eyes; massive, aquiline face, most massive, yet most delicate; of sallow-brown complexion, almost Indian looking; clothes cynically loose, free-and-easy; smokes infinite tobacco. His voice is musical, metallic, fit for loud laughter and piercing wail, and all that may lie between; speech and speculation free and plenteous. I do not meet in these late decades such company over a pipe! We shall see what he will

grow to." Besides the Carlyles and other notable contemporaries, Tennyson numbered at this time among his intimates John Sterling, whose life was written by the author of "Sartor Resartus," James Spedding, Bacon's editor, who wrote a fine critique of the 1842 volume of poems for the Edinburgh Review, Aubrey De Vere, Edmund Lushington, A. P. Stanley (afterwards Dean of Westminster), and Edward Fitzgerald, the future translator of the "Rubaiyat," or Quatrains of the Persian Poet, Omar Khayyam. These were all enthusiastic admirers of Tennyson's work and art, and his close personal friends, who have left on record many interesting sketches of the poet in their published writings, or in letters to him, and especially in reminiscences furnished for the Memoir by the poet's son.

Nine years before the appearance of the 1842 volume of Tennyson's verse the poet's bosom friend, Arthur Hallam, died at an immature age at Vienna, and his death was the subject of much brooding in noble, elegiac verse, written, as was Milton's 'Lycidas,' to commemorate the loss of one very dear to the poet. In "In Memoriam," as all know, Tennyson sought to assuage his grief and give fine, artistic expression to his profound sorrow at the loss of his companion and friend; but the work is more than a labored monument of woe, since it enshrines reflections of the most exalted and

inspiring character on the eternally momentous themes of life, death, and immortality. The work was published in 1850, and it at once challenged the admiration of the world for the perfection of its art, no less than for its high contemplative beauty. This was the year when Wordsworth passed to the grave, and Tennyson, in his room, was given the English laureateship. In this year, also, we find him happily married to Emily S. Sellwood, a lady of Berks, to whom the poet had been engaged since 1837. With his bride he took up house at Twickenham, near London, where his son, Hallam Tennyson, was born in 1852. In the following year he removed to Farringford, on the Isle of Wight, which was to be his home for forty years, and where, as his son tells us, some of his best-known works were written. Here, in 1854, his second son, Lionel, was born, whose young life of promise was terminated by jungle fever thirty-two years later on a return voyage from India, — all that was mortal of him finding repose in the depths of the Red Sea. To complete the chief incidents in the poet's personal career, we may here record that while Tennyson acquired another home at Aldworth, Surrey, — where he died Oct. 6, 1892, followed some four years later by his wife, — his happiest days were spent at Farringford, the pilgrimage place of many eminent worshippers of the poet's muse, where was dispensed an unostentatious

but open-handed and genial British hospitality. It should be added that, besides the perquisites which attach to the office of the Poet Laureate, Tennyson was given from 1845 a pension of £200 ($1000) and that, while in 1865 he refused a baronetcy, in 1884 he accepted a peerage, and had the honor of burial (Oct. 12 1892) in Westminster Abbey.

We now revert to the poet's early, or, rather, to his middle-age, creative years, and to a résumé of his principal writings, with a brief, running comment on his message and art. In 1847, three years before he became Laureate, he published "The Princess," a charming narrative poem in blank verse, which, though it abounds in fine descriptions and has an obvious moral in the treatment of the theme, — the woman question of to-day, — is inherently lacking in unity and strength, as well as weak in the depicting of the characters. In later editions the poem was amended in several faulty respects, and was especially enriched by the insertion between the cantos of many lovely and now familiar songs, which serve not only to bind together the whole structure of the poem, but to enhance and enforce its high moral meaning. Any analysis of "The Princess" is here deemed unnecessary, since it must not only be familiar to most readers of the poet's works, but familiar also in the varied annotated editions of such editors as Rolfe, Woodberry, and Wilson Farrand.

Familiar, it is believed, also, that it will be to Tennysonian students in the "Study of the Princess," with critical and explanatory notes by Dr. S. E. Dawson, of Montreal (now of Ottawa, Canada), — an able commentary which received the approval of Lord Tennyson himself, and elicited from him a highly interesting letter to the author on points in the poem either misunderstood or not discerningly apprehended by other critics and reviewers. The purport of the poem, it may be said, however, is to frown upon revolutionary attempts to alter the position of women, of scholastically be-gowned and college-capped dames, who would seek by other than nature's ways to put the sex upon an equality with man, while repressing their own individuality, doing violence to their maternal instincts, and trampling upon their "gracious household ways." In the handling of the "medley" Tennyson brings into exercise not only his far-seeing powers, which were greatly in advance of his time, but his gifts of raillery and humor, especially in the early divisions of the poem, as well as his high, serious motives in the moral lessons to which he points in the later cantos, where he aims at the elevation of women in correspondence with the diversity of their natures, for, as he himself says, "Woman is not undeveloped man, but diverse." His ideal of perfect womanhood he would attain through the awakening power of the affections and the trans-

forming power of love, rather than by ignoring the difference of physique, founding women's universities, and becoming blue-stockinged high priestesses of learning. Of the medley of characters in the poem, poet-princes in disguise at the college, violet-hooded lady principals,

> "With prudes for proctors, dowagers for deans,
> And sweet girl-graduates in their golden hair,"

it is Lady Psyche's child that is the true, effective heroine of the story, as Dr. Dawson aptly points out. "Ridiculous in the lecture room, the babe in the poem, as in the songs, is made the central point upon which the plot turns, for the unconscious child is the concrete embodiment of Nature herself, clearing away all merely intellectual theories by her silent influence." This is the explanation, then, of the appearance of the babe — symbol of the power and tenderness of Nature — in critical passages of the poem, as well as in the unsurpassably beautiful intercalary songs, for it is the child that enables the poet to soften the Princess's nature toward the Prince, and to effect the reconciliation between the Princess and Lady Psyche, while imparting beauty as well as high meaning in the recital of the incidents and development of the tale.

"In Memoriam," as we have stated, appeared in 1850, and was unique in its appeal to the mind of the era as a stately meditative poem on a single theme, — the

death of the poet's friend, Arthur Hallam. The English language, if we except Milton's 'Lycidas' and 'Hymn to the Nativity,' and Wordsworth's grand 'Ode on Intimations of Immortality,' has no poem so noble or so faultless in its art as this magnificent series of detached elegies. The high thought, philosophic reflection, and passionate religious sentiment that mark the whole work, added to the exquisiteness of the versification, place it wellnigh supreme in the literature of elegiac poetry. Its grave, majestic hymnal measure adds to its solemn beauty and stateliness, while the varied phases of spiritualized thought and emotional grief which find expression in the poem seem to elevate it in its harmonies to the rank of a profound psalm-chant from the choir of heaven. In the sumptuously embellished edition of the elegy, embodying Mr. Harry Fenn's drawings, with a sympathetic preface by the Rev. Dr. Henry Van Dyke, there is a brief but luminous analysis of the nine divisions of the poem, or commentary on the great classic. To those who desire to read the great elegy understandingly, the value of Dr. Van Dyke's work is earnestly commended, since without this commentary, or such as are to be obtained in other critical sources, there is much of poetic beauty, of sorrow-brooding thought, and especially of emotional reflection on life, death, and immortality, in the hundred and thirty lyrics of which the poem consists, which will be lost to

even the thoughtful reader. The poem, as a critic truthfully observes, has done much "to express and to consolidate all that is best in the life of England, its domestic affection, its patriotic feeling, its healthful morality, its rational and earnest religion."

The sentimental metrical romance "Maud" appeared in 1855 (the year of the Crimean War), with some additional poems, including 'The Charge of the Light Brigade,' written after Raglan's repulse of the Russians at Balaclava, and the fine 'Ode on the Death of the Duke of Wellington.' The lyrical love-drama, "Maud," we are told, was one of Tennyson's favorite productions, of which he was wont to read parts to his guests. As the poet has himself said of the monodrama, "it is a little Hamlet," "the history of a morbid poetic soul, under the blighting influence of a recklessly speculative age. He is the heir of madness, an egotist with the makings of a cynic, raised to sanity by a pure and holy love which elevates his whole nature, passing from the heights of triumph to the lowest depths of misery, driven into madness by the loss of her whom he has loved, and when he has at length passed through the fiery furnace, and has recovered his reason, giving himself up to work for the good of mankind through the unselfishness born of his great passion." The poem, when it appeared, was reviled by some critics as an allegory of the war with Russia, and they did its author the injustice of suppos-

ing that he lauded war for war's sake, instead of, as is the case, applauding war only in defence of liberty. Apart from this misunderstanding, due to abhorrence of the war-frenzy of the period, the poem has outlived the mistaken objections to it when it appeared, and is now admired in its vindicated light, and especially for the rich and copious beauty manifest throughout the work, and for the magnificent lyric art with which it is composed.

We now come to Tennyson's masterpiece, the "Idylls of the King," an epic of chivalry, interpreted as personifying in its various characters the soul at war with the senses. These appeared during the years 1859 and 1872. Each of the Idylls, which has a connecting thread binding it to its fellow-allegory, takes its plot or fable from the legendary lore that has clustered round the name of Arthur, mythical King of the Britons about the era of the first invasion by the English. Out of the mass of material which was gathered by Sir Thomas Malory for his prose history of Arthur and his Knights, Tennyson takes the chief incidents and noblest heroic traits of character in the legends and blends them in a fashion of his own, steeping them in an atmosphere which his imagination creates, and lighting up all with a passion and glory of knightly adventure, as well as with a chasteness, purity, and high fervor of ethical thought, that must perpetuate the romance, as he has

given it us, unto all time. The sections of the work as it now stands, in addition to its introductory dedication to the late Prince Consort, and the closing poem to the late Queen Victoria, are as follows: 'The Coming of Arthur,' which relates the mystery of the birth of the King, his marriage to Guinevere, daughter of Leodogran, King of Cameliard, and the wonders attending his crowning and establishment on the throne; next comes 'Gareth and Lynette,' a tale of love and scorn, and of the conflict between a false pride and a true ambition; to this is appended 'The Marriage of Geraint,' of Arthur's court, and a member of the great order of the Round Table. Next follows 'Geraint and Enid,'—Enid, the gentle and timid, whom Geraint had married after wooing the haughty Lynette,—a tale of pure and loyal womanhood, darkened for awhile by the clouds of jealousy and suspicion, yet closing happily long after the "spiteful whispers" had died down, and Geraint, assured of Enid's fealty, had ruled his kingdom well and gone forth to "crown a happy life with a fair death" against the heathen of the Northern Sea, "fighting for the blameless King." The next Idyll relates how the venerable magician Merlin succumbs to the thrall of the wily harlot Vivien, decked in her rare robe of samite, and yields to her the charm which was his secret. 'Lancelot and Elaine' follows with its conflict between the virgin innocence of Elaine, the lily maid of

Astolat, and the guilty passion of the noble though erring Lancelot. To this, in order, succeeds 'The Holy Grail,' telling of the vain quest of Arthur's Knights for the sacred relic. Despite its mystic character, this is admittedly one of the finest of the series of Idylls, and rich in its spiritual teaching, — that the heavenly vision is to be seen only by the eyes of purity and grace. 'Pelleas and Ettarre' is a tale of dole, showing the evil at work at the court, and the wrecking effect of another woman's perfidy. 'The Last Tournament' has for its hero the court fool, who, amid the treason of Arthur's knights, is firm in his loyal allegiance to the King. In contrast to him is Sir Tristram, who, despite his prowess, in jousts on the tilting-field, is "one to whom faith is foolishness, and the higher life an idle delusion." The climax is reached in 'Guinevere,' whom, in spite of her faithlessness and guilty intrigue with Lancelot, Arthur, with his great high soul, pityingly loves and forgives. The end comes with the sad though shadowy 'Passing of Arthur,' the royal barge mysteriously carrying him out into the beyond, whence issue sounds of hail and greeting to the victor-hero

> "—— as if some fair city were one voice
> Around a king returning from his wars."

In 1864 Tennyson published "Enoch Arden," an idyll of the hearth, depicting a pathetic incident in a seafarer's career, of much simple idyllic beauty. The poem

has some fine descriptive passages, and many examples of the poet's rich word-painting in treating of the splendid tropic scenery among which the mariner is for the time cast. The volume contained also some minor pieces, including the dialect poem, 'The Northern Farmer,' with its humorous rendering of yokel speech. This was followed (1875–84) by three dramas on English historical themes, which, as the poet had not, as we have already hinted, the gifts of a Shakespeare, were somewhat unsuccessful, though written, despite Tennyson's advanced years, with much fine force and vividness of character delineation. These dramas (to enumerate them in their historic order) were "Harold," "Becket," and "Queen Mary." "Becket" is the best and most ambitious of them, though not, as "Queen Mary" is, a play designed for the stage. It is a vigorous Englishman's closet study of a prolonged and bitter struggle — the conflict in Henry II.'s time between the church and the crown — as exhibited in the person and dominant ecclesiastical attitude of the audacious prelate who met his tragic end by Canterbury's altar. "Harold" strikingly realizes to the modern reader the stirring activities of a strenuous time, — that of the English conquest by Norman William, opposed to the death by Harold at Senlac in 1066. The drama is as rich in character as it is swift and energetic in action. "Queen Mary" deals with the religious and

political dissensions (the struggle between the Papacy and the Reformation) of Mary Tudor's era, with her love for and marriage with Philip of Spain, and her hopeless yearning for an heir to the double crown of England and Spain. An important and prized addition to our English literature the drama undoubtedly is, but it is not more than a careful, accurate, and elaborate historical study. It lacks, both in spirit and movement, the characteristics of the Shakespearian drama. Its characters, however, are vividly brought out, and its situations are often picturesque and telling. The personages, moreover, are wanting in the play of creative effect, and the incidents lack the stir of inventive resource. Further, though the story of Mary's life is essentially dramatic, and the incidents of her reign are tragic in the extreme, the poet does not seem to have extracted from either that which goes to the making of a great drama. This evidently is the result of following too faithfully the events of history and the records of the time, as well as, in some degree, from want of sympathy, which Tennyson could not impart, with the leading characters and their actions. Still, much is made of the materials; and though the personages and incidents appear in the narrative in the neutral tints of history, yet the period is made to reappear with a freshness and distinctness which, while it satisfies the scholar, gives a true charm to every lover of the drama.

Again and again, as we read, are we reminded of the Laureate's rare poetical fancy and fine literary instinct, and the dialogues contain many passages of striking thought and noble utterance. But the work is overcast by the great gloom of its central figure, — the gloom of bigotry, passion, jealousy, disappointment, and despair which ever environs the miserable Queen; and much though the poet has striven to brighten the picture and awaken sympathy for the weakness of the woman, who, royal mistress though she was, could not command her love to be requited, the poetic measure of his lines roughens and hardens to the close, when the curtain falls on what is felt to be a tragic and unlovely life.

We can only briefly refer to the other *dramatis personæ* introduced to us, who are among the notable historical characters that figure during Mary Tudor's reign. They are those who take part in the incidents, religious, civil, and political, of the period, and are, for the most part, both in speech and bearing, the portraits familiar to us in Mr. Froude's history. Of these the most pleasing is the Princess Elizabeth, whose portrait is drawn with masterly skill, and engages our interest as the fortunes of its original oscillates "'Twixt Axe and Crown":—

> "A Tudor
> Schooled by the shadow of death, a Boleyn too
> Glancing across the Tudor."

But, aside from the interest in the safety of her person, which is in constant jeopardy from the jealousy of her half-sister, Elizabeth wins upon the reader by her modest, maidenly bearing, her frankness of manner, and by a playfulness of disposition which readily adapts itself to the restraints which the Queen is ever placing upon her person, and which endears her to the people, who, could the hated Mary be got rid of, would fain become her subjects. The civil strife of the period furnishes material for some powerful passages, which are wrought up with excellent effect, and in this connection Sir Thomas Wyatt, Sir Thomas Stafford, the Earl of Devon, Sir William Cecil, and other historical personages appear upon the stage. The other incidents introduced are those which attach themselves to the religious persecutions of the time, and which brought Cranmer to the stake, and give play to the papal intrigues of Pole, Gardiner, and the emissaries of the Spanish court. The second and third scenes in the fourth act devoted to Cranmer, which detail his martyrdom, are hardly so satisfactory as we think they might have been, though the poet here again follows closely the historical accounts. The scenes, however, give occasion for the introduction of a couple of local gossips whose provincial dialect and keen interest in the national and religious policy of the time, here as in occasional street scenes, are cleverly portrayed. This sapient reflection

in the mouth of one of these gossips, Tib, is a specimen at hand: —

"A-burnin' and a-burnin', and a-making o' volk madder and madder; but tek thou my word vor 't, Joan, — and I bean't wrong not twice i' ten year, — the burnin' o' the owld archbishop 'ill burn the Pwoap out o' this 'ere land for iver and iver."

Philip we have not spoken of; but he fills such a hateful niche in the historical gallery of the time, and the poet introduces him but to act his pitiful rôle, that we pass him by, though many of the grandest passages in the drama are those which give expression to Mary's passionate love for him, and her longing desire for an issue of their marriage, which afterwards culminates in her madness and death.

We have to speak of but one other character in the drama, whose death, it has been said, was sufficient to honor and to dishonor an age. The beautiful Lady Jane Grey appears for a little among the shadows of the poem, and moves to her tragic fate.

> "Seventeen, — a rose of grace!
> Girl never breathed to rival such a rose!
> Rose never blew that equalled such a bud."

A few songs of genuine Tennysonian harmony, pitched in the keys that most fittingly suit the singer's mood, are interspersed through the drama, and serve to relieve the narratives of their gloom and plaint. Their

presence, we cannot help thinking, recalls work better done, and more within the limitations of the poet's genius, than this drama of "Queen Mary." As a dramatic representation the drama had the advantage of being produced at the Lyceum Theatre, London, with all the historic art and sumptuous stage-setting with which Sir Henry Irving could well give it, — Irving himself personating Philip, while Miss Bateman took the part of Queen Mary. "Becket," we should here add, was also given on the stage, and with much dramatic effectiveness, by Irving, — over fifty performances of it being called for. None of the dramas, however, as we have said, was a success, though each has its merit, while all are distinguished by many passages of noble and strenuous thought.

Other dramatic compositions the poet attempted, though of minor importance to the trilogy just spoken of. These were "The Falcon," the groundwork of which is to be found in "The Decameron;" "The Cup," a tragedy, rich in action, with an incisive dialogue, borrowed from Plutarch. The former was staged by Mr. and Mrs. Kendal, and had a run of sixty-seven nights; the latter also was staged with liberal magnificence, by Irving, and met with considerable success. "The Promise of May" is another play which was staged, in 1882, by Mrs. Bernard Beere, but met with failure by the critics, owing, in some degree, to its supposed caricature

of modern agnostics, and to the repellent portrayal of one of the characters in the piece, the sensualist, Philip Edgar. Later, in (1892) appeared "The Foresters," a pretty pastoral play, on the theme of Robin Hood and Maid Marian, which was produced on the boards in New York by Mr. Daly and his company, with a charming woodland setting. The later publications of the Laureate, in his own distinctive field of verse, embrace "The Lover's Tale" (1879), "Ballads and other Poems" (1880), "Tiresias and Other Poems" (1885), "Locksley Hall Sixty Years After" (1886), "Demeter and Other Poems" (1889), and "The Death of Œnone, Akbar's Dream, and Other Poems," in the year of the Poet's death (1892). In these various volumes there is much admirable work and many tuneful lyrics in the old charming, lilting strain, with not a few serious, thoughtful, stately pieces of verse, "the after-glow," as Stedman phrases it, "of a still radiant genius. . . . His after-song," continues this fine critic, "does not wreak itself upon the master passions of love and ambition, and hence fastens less strongly on the thoughts of the young; nor does it come with the unused rhythm, the fresh and novel cadence, that stamped the now hackneyed measure with a lyric's name. Yet, as to its art and imagery, the same effects are there, differing only in a more vigorous method, an intentional roughness, from the individual early verse. The new burthen is termed pes-

simistic, but for all its impatient summary of ills, it ends with a cry of faith."

We must now hasten to a close, delightful as it would be to linger over so attractive a theme, and to dwell upon the personality of one who so uniquely represents the mind, as he has so remarkably influenced the thought, of his age. But considering the length of the present paper, this cannot be. Happily, however, the fruitage is ever with us of the poet's full fourscore years of splendid achievement with the hallowing memory of a forceful, opulent, and blameless life. To few men of the past century can the reflecting mind of a coming time more interestingly or more instructively turn than to this profound thinker and mighty musical singer, steeped as he was in the varied culture of the ages, endowed with great prophetic powers, with phenomenal gifts of poetic expression, and with a soul so attuned to the harmonies of heaven as to make him at once the counsellor and the inspiring teacher of his time. Who, in comparison with him, has so felt the subtle charm, or so interpreted to us the infinite beauty, of the world in which we live, or more impressively deepened in the mind and conscience of the age belief in the verities of religion, while quelling its doubts and quickening its highest hopes and faith? "Tennyson was a passionate believer in the immortal life; this was so real to him that he had no patience with scepticism

on the subject. To question it in his presence was to bring upon one's head a torrent of denunciation and wrath. His great soul was intuitively conscious of spiritual realities, and he could not understand how little soulless microbes of men and women were destitute of his deep perception. Prayer was to him a living fact and power, and some of his words about it are among the noblest ever written. When some one asked him about Christ, he pointed to a flower and said, 'What the sun is to that flower, Christ is to my soul.'"

Apart as he stood from the tumult and the frivolities of his age, he was yet of it, and sensibly and beneficently influenced it for its higher and nobler weal. In politics, as we know, he was a liberal conservative, — a conserver of what was best in the present and the past, and an advancer of all that tended to true and harmonious progress. His knowledge of men and things was wide and deep; in the philosophic thought and even in the science of his time he was deeply read; while he was lovingly interested in all nature, and especially in the common people, whom he often wrote of and touchingly depicted in their humble ways of toil as well as of joy and sorrow. Above all, he was a man of high and real faith, who believed that "good" was "the final goal of ill;" and in "the dumb hour clothed in black" that at last came to him, as it comes to all, he confidingly put his trust in Loving Omnipotence and reverently and

beautifully expressed the hope of seeing the guiding Pilot of his life when, with the outflow of its river-current into the ocean of the Divine Unseen, he crossed the bar. For humanity's sake and the weal of the world in a coming time this was his joyous cry: —

. . . . . .
"Ring in the nobler modes of life,
With sweeter manners, purer laws.
. . . . . .
Ring in the love of truth and right,
Ring in the common love of good.
. . . . . .
Ring in the valiant man and free,
The larger heart, the kindlier hand;
Ring out the darkness of the land,
Ring in the Christ that is to be!"

What our formative, high-wrought English literature has suffered in Tennyson's passing from the age on which he has shed so much glory those can best say who are of his era, and have been intimate, as each appeared, with every successive issue of his works. To the latter, as to all thoughtful students of his writings, his has been the supreme interpreting voice of the past century, while his influence on the literary thought of his time has been of the highest and most potent kind. Especially influential has Tennyson been in carrying forward, with new impulses and inspiration, the poetic traditions of that grand old motherland of English song to which our own poets in the New World, as well as the younger bards of the British Isles, owe so much. If

we except the Laureate, there have been few who have worn the singing robe of the poet who, in these later years at least, have spoken so impressively to cultured minds on either side of the ocean, or have more effectively expressed to his age the high and hallowing spirit of modern poetry. It is this that has given the Laureate his exalted place among the great literary influences of the century, and made him the one indubitable representative of English song, with all its tuneful music and rare and delicate art. To a few of the great choir of singers of the past Tennyson admittedly owed something, both in tradition and in art, — for each new impulse has caught and embodied not a little of the spirit and temper, as well as the culture and inspiration, of the old, — but his it was to impart new and fresher thought and a wider range of harmony and emotion than had been reached by almost any of his predecessors, and to speak to the mind and soul of his time as none other has spoken or could well speak. From the era of Shakespeare and Milton and their chief successors, it is to Tennyson's honor and fame that he has given continuity as well as high perfection to the great coursing stream of noble British verse.

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PART II.

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RICHARD WAGNER.

1813–1883.

MODERN MUSIC.

BEACON LIGHTS OF HISTORY.

RICHARD WAGNER: MODERN MUSIC.

By HENRY T. FINCK.

IF the Dresden schoolboys who attended the *Kreuzschule* in the years 1823–1827 could have been told that one of them was destined to be the greatest opera composer of all times, and to influence the musicians of all countries throughout the second half of the nineteenth century, they would, no doubt, have been very much surprised. Nor is it likely that they could have guessed which of them was the chosen one. For Richard Wagner — or Richard Geyer, as he was then called, after his stepfather — was by no means a youthful prodigy, like Mozart or Liszt. It is related that Beethoven shed tears of displeasure over his first music lessons; nevertheless, it was obvious from the beginning that he had a special gift for music. Richard Wagner, on the other hand, apparently had none. When he was eight years old his stepfather, shortly before his death, heard him play on the piano two pieces

from one of Weber's operas, which made him wonder if Richard might "perhaps" have talent for music. His piano teacher did not believe even in that "perhaps," but told him bluntly he would "never amount to anything" as a musician.

For poetry, however, young Richard had a decided inclination in his school years; and this was significant, inasmuch as it afterwards became his cardinal maxim that in an opera "the play 's the thing," and the music merely a means of intensifying the emotional expression. Before his time the music, or rather the singing of florid tunes, had been "the thing," and the libretto merely a peg to hang these tunes on. In this respect, therefore, the child was father to the man. At the age of eleven he received a prize for the best poem on the death of a schoolmate. At thirteen he translated the first twelve books of Homer's Odyssey. He studied English for the sole purpose of being able to read Shakspeare. Then he projected a stupendous tragedy, in the course of which he killed off forty-two persons, many of whom had to be brought back as ghosts to enable him to finish the play.

This extravagance also characterized his first efforts as a composer, when he at last turned to music, at the age of sixteen. One of his first tasks, when he had barely mastered the rudiments of composition, was to write an overture which he intended to be more com-

plicated than Beethoven's Ninth Symphony. Heinrich Dorn, who recognized his talent amid all the bombast, conducted this piece at a concert. At the rehearsal the musicians were convulsed with laughter, and at the performance the audience was at first surprised and then disgusted at the persistence of the drum-player, who made himself heard loudly every fourth bar. Finally there was a general outburst of hilarity which taught the young man a needed lesson.

Undoubtedly the germs of his musical genius had been in Wagner's brain in his childhood, — for genius is not a thing that can be acquired. They had simply lain dormant, and it required a special influence to develop them. This influence was supplied by Weber and his operas. In 1815, two years after Wagner's birth, the King of Saxony founded a German opera in Dresden, where theretofore Italian opera had ruled alone. Weber was chosen as conductor, and thus it happened that Wagner's earliest and deepest impressions came from the composer of the "Freischütz." In his autobiographic sketch Wagner writes: "Nothing gave me so much pleasure as the 'Freischütz.' I often saw Weber pass by our house when he came from rehearsals. I always looked upon him with a holy awe." It was lucky for young Richard that his stepfather, Geyer, besides being a portrait painter, an actor, and a playwright, was also one of Weber's tenors at the opera.

This enabled the boy, in spite of the family's poverty, to hear many of the performances. In fact, Wagner, like Weber, owes a considerable part of his success as a writer for the stage to the fact that he belonged to a theatrical family, and thus gradually learned "how the wheels go round." Such practical experience is worth more than years of academic study.

While Wagner cordially acknowledged the fascination which Weber's music exerted on him in his boyhood, he was hardly fair to Weber in his later writings. In these he tries to prove that his own music-dramas are an outgrowth of Beethoven's Ninth Symphony. When Beethoven wrote that work, Wagner argues, he had come to the conclusion that purely instrumental music had reached a point beyond which it could not go alone, wherefore he called in the aid of poetry (sung by soloists and chorus), and thus intimated that the art-work of the future was the musical drama, — a combination of poetry and music.

This is a purely fantastic notion on Wagner's part. There is no evidence that Beethoven had any such purpose; he merely called in the aid of the human voice to secure variety of sound and expression. Poetry and music had been combined centuries before Beethoven in the opera and in lyric song.

No, the roots of Wagner's music-dramas are not to be found in Beethoven, but in Weber. His "Frei-

schütz" and "Euryanthe" are the prototypes of Wagner's operas. The "Freischütz" is the first masterwork, as Wagner's operas are the last, up to date, of the romantic school; and it embodies admirably two of the principal characteristics of that school: one, a delight in the demoniac, the supernatural — what the Germans call *gruseln;* the other, the use of certain instruments, alone or in combination, for the sake of securing peculiar emotional effects. In both these respects Wagner followed in Weber's footsteps. With the exception of "Rienzi" and "Die Meistersinger," all of his operas, from the "Flying Dutchman" to "Parsifal," embody supernatural, mythical, romantic elements; and in the use of novel tone colors for special emotional effects he opened a new wonder-world of sound, to which Weber, however, had given him the key.

"Lohengrin," the last one of what are usually called Wagner's "operas," as distinguished from his "music-dramas" (comprising the last seven of his works), betrays very strongly the influence of Weber's other masterwork, "Euryanthe." This opera, indeed, may also be called the direct precursor of Wagner's music-dramas. It contains eight "leading motives," which recur thirty times in course of the opera; and the dramatic recitatives are sometimes quite in the "Wagnerian" manner. But the most remarkable thing is that Weber uses language which practically sums up

Wagner's idea of the music-drama. "'Euryanthe,'" he says, "is a purely dramatic work, which depends for its success solely on the co-operation of the united sister-arts, and is certain to lose its effect if deprived of their assistance."

When Wagner wrote his essay on "The Music of the Future" for the Parisians (1860) he remembered his obligations to the Dresden idol of his boyhood by calling attention to "the still very noticeable connection" of his early work, "Tannhäuser," with "the operas of my predecessors, among whom I name especially Weber." He might have mentioned others,—Gluck, for instance, who curbed the vanity of the singers, and taught them that they were not "the whole show;" Marschner, whose grewsome "Hans Heiling" Wagner had in mind when he wrote his "Flying Dutchman;" Auber, whose "Masaniello," with its dumb heroine, taught Wagner the importance and expressiveness of pantomimic music, of which there are such eloquent examples in all his operas. During his three and a half years' sojourn in Paris, just at the opening of his career as an opera composer (1839–1842), he learned many things regarding operatic scenery, machinery, processions, and details, which he subsequently turned to good account. Even Meyerbeer, the ruler of the musical world in Paris at that time, was not without influence on him, though he had cause to disap-

prove of him because of his submission to the demands of the fashionable taste of the day, which contrasted so strongly with Wagner's own courageous defiance of everything inconsistent with his ideals of art. The result to-day — Meyerbeer's fall and Wagner's triumph — shows that courage, like honesty, is, in the long run, the best policy, and, like virtue, its own reward.

It is important to bear in mind all these lessons that Wagner learned from his predecessors, as it helps to explain the enormous influence he exerted on his contemporaries. Wonderful as was the power and originality of his genius, even he could not have achieved such results had he not had truth on his side, — truth, as hinted at, in moments of inspiration, by many of his predecessors.

Wagner was most shamefully misrepresented by his enemies during his lifetime. A thousand times they wrote unblushingly that he despised and abused the great masters, whereas in truth no one ever spoke of them more enthusiastically than he, or was more eager to learn of them, though, to be sure, he was honest and courageous enough also to call attention to their shortcomings. In all his autobiographic writings there is not a more luminous passage than the following, in which he relates his experiences as conductor at the Riga Opera in 1838, when he was at work on "Rienzi":—

"The peculiar gnawing melancholy which habitually

overpowered me when I conducted one of our ordinary operas was interrupted by an inexpressible, enthusiastic delight, when, here and there, during the performance of nobler works, I became conscious of the incomparable effects that can be produced by musico-dramatic combinations on the stage, — effects of a depth, sincerity, and direct realistic vivacity, such as no other art can produce. I felt quite elated and ennobled during the time that I was rehearsing Méhul's enchanting 'Joseph' with my little opera company." "Such impressions," he continues, "like flashes of lightning" revealed to him "unsuspected possibilities." It was by utilizing these "possibilities" and hints, and at the same time avoiding the errors and blemishes of his predecessors, that his superlative genius was enabled to create such unapproachable masterworks as "Siegfried" and "Tristan and Isolde."

The way up to those peaks was, however, slow and toilsome. For years he groped in darkness, and light came but gradually. It has already been intimated that his genius was slow in developing. A brief review of his romantic career will bring out this and other interesting points.

At the time when Richard Wagner was born (May 22, 1813), Leipzig was in such a state of commotion on account of the war to liberate Germany from the Napoleonic yoke that the child's baptism was deferred

several months. To his schooldays reference has been made already, and we may therefore pass on to the time when he tried to make his living as an operatic conductor. Although he was then only twenty-one years old, he showed remarkable aptitude for this kind of work from the beginning, and it was through no fault of his that misfortune overtook every opera company with which he had anything to do. The bankruptcy, in 1836, of the manager of the Magdeburg Opera, affected him most disastrously, for it came at the moment when he had arranged for the first performance of an opera he had written, entitled, "Das Liebesverbot," or "The Novice of Palermo," and which therefore was given only once. Many years later an attempt was made to revive this juvenile work at Munich, but the project was abandoned because, as the famous Wagnerian tenor, Heinrich Vogl, informed the writer of this article, "Its arias and other numbers were such ludicrous and undisguised imitations of Donizetti and other popular composers of that time that we all burst out laughing, and kept up the merriment throughout the rehearsal." This is of interest because it shows that Wagner, like that other great reformer, Gluck, began his career by writing fashionable operas in the Italian style. A still earlier opera of his, "The Fairies," — the first one he completed, — was not produced till 1888, fifty-five years after it had been written, and five years after Wagner's death. This has

been performed a number of times in Munich, but it is so weak and uninteresting in itself that it required a splendid stage setting, and the "historic" curiosity of Wagner's admirers to make it palatable. It is significant that already in these early works, Wagner wrote his own librettos, — a policy which he pursued to the end.

Königsberg was the next city where the opera company with which he was connected, failed. This was the more embarrassing to him, as he had in the incantime been so unwise as to marry a pretty actress, Minna Planer, who was destined, for a quarter of a century, to faithfully share his experiences, — chiefly disappointments. The pittance he got as conductor of these small German opera companies did not pay his expenses, all the less as he was fond of luxurious living, and, like most artists, the world over, foolishly squandered his money when he happened to have any.

At Riga, where Wagner next attempted to establish himself, the opera company again got into trouble, and his financial straits became such that, relying on his future ability to meet his obligations, he resolved to leave that part of the world altogether and seek his fortune in Paris. He knew that the Prussian Meyerbeer had won fame and fortune there, — why should not he have the same good luck? He had unbounded confidence in his own ability, and what increased his

hopes of a Parisian success, was that he had already completed two acts of a grand historic opera, "Rienzi," based on Bulwer's novel, and written in the sensational and spectacular style of Meyerbeer. He supposed that all he had to do was to go to Paris, finish this opera, get it accepted through the influence of his countryman and colleague, Meyerbeer, and — wake up some morning famous and wealthy. He was not the first man who built castles in Spain.

To-day a trip from Riga to Paris is a very simple affair. You get into a train, and in about twenty-four hours are at your goal. In 1839 there were no such conveniences. Wagner had to go to the Prussian seaport of Pillau, and there board a sailing vessel which took him to London in three weeks and a half. His journey, however, was a much more romantic affair than a railway trip would have been. In the first place, it was a real flight — from his creditors whom he had to evade. Next he had to dodge the Russian sentries, whose boxes were placed on the boundary line only a thousand yards apart. A friend discovered a way of accomplishing this feat, and Wagner presently found himself on the ship, with his wife and his enormous Newfoundland dog. In his trunk he had what he hoped would help him to begin a brilliant career in Paris: one opera completed, — "The Novice of Palermo;" two acts of another, — "Rienzi;" and in his head he had the plot and some of

the musical themes for a third, — "The Flying Dutchman."

The sea voyage came just in time to give him local color for this weird nautical opera. Three times the vessel was tossed by violent storms, and once the captain was obliged to seek safety in a Norwegian harbor. The sailors told Wagner their version of the "Flying Dutchman" legend, and altogether these adventures were the very thing he wanted at the time, and aided him in making his opera realistic, both in its text and its music, which imitates the howling of the storm winds and "smells of the salt breezes."

So for once our young musician had a streak of luck. But it did not last long. He found Paris a very large city, and with very little use for him. He made the most diverse efforts to support himself, nearly always without success. Once it seemed as if his hopes were to be fulfilled. The Théâtre de la Renaissance accepted his "Novice of Palermo;" but at the last moment there was the usual bankruptcy of the management, — the fourth that affected him! Then he wrote a Parisian Vaudeville, but it had to be given up because the actors declared it could not be executed. The Grand Opera, on which he had fixed his eye, was absolutely out of the question. He was brought to such straits that he offered to sing in the chorus of a small Boulevard theatre, but was rejected. His wife pawned her jewels; on several occa-

sions it is said that she even went into the street to beg a few pennies for their supper. It was doubtless during these years of starvation that Wagner acquired those gastric troubles which in later years often prevented him from working more than an hour or two a day.

A few German friends occasionally gave a little pecuniary aid, but the only regular source of income was musical hackwork for the publisher Schlesinger, who gladly availed himself of Wagner's skill in having him make vocal scores of operas, or arrange popular melodies for the piano and other instruments. Wagner also wrote stories and essays for musical periodicals, for which he received fair remuneration; but his attempt to compose romances and become a parlor favorite failed. Nobody wanted his songs, and he finally offered them to the editor of a periodical in Germany for two dollars and a half to four dollars apiece. This may seem ludicrously pathetic; but then had not poor Schubert, a little more than a decade before this, sold much better songs for twenty cents each!

Meyerbeer no doubt aided Wagner, but considering his very great influence in Paris, he achieved surprisingly little for him. The score of "Rienzi" had been completed in 1840, and in the spring of the next year, Wagner went to Meudon, near Paris, and there composed the music of "The Flying Dutchman," in seven weeks, but neither of these operas seemed to have the least

chance to appear on the boards of the Grand Opera. The best their author could do was to sell the libretto of "The Flying Dutchman" for one hundred dollars, reserving the right to set it to music himself.

The outcome of all these disappointments was that he finally lost hope so far as Paris was concerned, and sent his "Rienzi" to Dresden and his "Flying Dutchman" to Berlin. The "Novice of Palermo" he had given up entirely after the bankruptcy of the Renaissance Théâtre, because, as he wrote, "I felt that I could no longer respect myself as its composer." Meyerbeer had, at his request, kindly sent a note to the intendant of the Dresden Opera, in which he said, among other things, that he had found the selections from "Rienzi," which Wagner had played for him, "highly imaginative and of great dramatic effect." Tichatschek, the famous Dresden tenor, examined the score, and liked the title rôle; the chorus director, Fischer, also pleaded for the acceptance of the opera; and so at last Wagner got word in Paris that it would be produced in Dresden. As Berlin, too, retained the manuscript of his other opera, there was reason enough for him to end his Parisian sojourn and return to his native country. He went overland this time, and, to cite his own words, "For the first time I saw the Rhine; with tears in my eyes I, the poor artist, swore eternal allegiance to my German fatherland."

It was fortunate in every way that he went to Dresden. His opera required many alterations and improvements, which he alone could make. He was permitted to superintend the rehearsals, which was, of course, a great advantage to the opera. The singers grew more and more enthusiastic over the music, and when the first public performance was given, on October 20, 1842, the audience also was delighted and remained to the very end, although the performance lasted six hours. The composer immediately applied the pruning-knife and reduced the duration to four hours and a half (from 6 to 10.30, — opera hours were early in those days); but the tenor, Tichatschek, declared with tears in his eyes, "I shall not permit any cuts in my part! It is too heavenly."

Those were proud and happy days for Wagner. "I, who had hitherto been lonely, deserted, homeless," he wrote, "suddenly found myself loved, admired, by many even regarded with wonderment." "Rienzi" was repeated a number of times to overcrowded houses, though the prices had been put up. It was regarded as "a fabulous success," and the management was eager to follow it up with another. So the score of "The Flying Dutchman" was demanded of Berlin (where they seemed in no hurry to use it), and at once put into rehearsal. It was produced in Dresden on January 2, 1843, only about ten weeks after "Rienzi,"— an almost unprece-

dented event in the life of an opera composer. Wagner conducted the second opera himself (also "Rienzi," after the first few performances), and gave so much satisfaction that he was shortly afterwards appointed to the position of royal conductor (which he held about six years).

So far, all seemed well. But disappointments soon began to overshadow his seeming good luck. The first production of the "Flying Dutchman" can hardly be called a success. Wagner himself characterized the performance as being, in its main features, "a complete failure," and the stage setting "incredibly awkward and wooden" (very different from what it is in Dresden to-day). Mme. Schroeder-Devrient was an admirable "Senta," and received enthusiastic applause; but the opera itself puzzled the audience rather than pleased it.

The music-lovers of Dresden had expected another opera *à la* Meyerbeer, like "Rienzi," with its arias and duos, its din and its dances, its pomps and processions, its scenic and musical splendors. Instead of that, they heard a work utterly unlike any opera ever before written; an opera without arias, duets, and dances, without any of the glitter that had theretofore entertained the public; an opera that simply related a legend in one breath, as it were, — like a dramatic ballad; an opera that indulged in weird chromatic scales, and harsh but expressive harmonies, with an unprecedented license.

Here was the real Wagner, but even in this early and comparatively crude and simple phase, Wagner was too novel and revolutionary to be appreciated by his contemporaries; hence it is not to be wondered at that the "Flying Dutchman," after four performances in Dresden, and a few in Cassel and Berlin, disappeared from the stage for ten years.

Although Wagner was now royal conductor, he did not succeed in securing a revival of this opera at Dresden. His next work, "Tannhäuser," was nevertheless promptly accepted. The score was completed on April 13, 1845, and six months later (October 19), the first performance was given. Wagner had thrown himself with all his soul into the composition of this score. To a friend in Berlin he wrote: "This opera must be good, or else I never shall be able to do anything worth while." The public at first seemed to agree with him. Seven performances were given before the end of the season, and it was resumed the following year; yet Wagner came to the conclusion that he had written the opera "for a few intimate friends, but not for the public," to cite his own words. What the public had expected and desired was shown by its enthusiastic reception of "Rienzi," and its colder treatment of the "Dutchman." But "Tannhäuser" was like the second opera; in fact, even "more so." Wagner had outlived the time when he was willing to make concessions to

current taste and fashion; thenceforth he went his own way, eager, indeed, for approval, but stubbornly refusing to win it by sacrificing his high art ideals.

Here was true heroism, genuine manliness! Had he been willing to write more operas like "Rienzi," he might have revelled in wealth (he loved wealth!) and basked in the sunshine of popularity, like Meyerbeer. But not one inch of concession did he make for the sake of the much-coveted riches and popular favor.

Yet was not his next work, "Lohengrin," of a popular character? Popular to-day, yes; but in the days of his Dresden conductorship he could not even get it accepted for performance at his own opera-house! It was completed in August, 1847 (the last act having been written first and the second last), but although he remained in Dresden two years longer, all his efforts to get it staged failed, for various reasons. And when, at last, Liszt gave it for the first time, on August 28, 1850, at Weimar, whence it gradually made its way to other opera-houses, its reception everywhere showed that it was very far from being considered a "popular" work. The critics, especially, vied with one another in abusing this same "Lohengrin," which at present is sung more frequently than any other opera; and they continued to abuse it until about twenty years ago. "An abyss of ennui," "void of all melody," "an insult to the very essence of music," "a caricature of music,"

"algebraic harmonies," "no tangible ideas," "not a dozen bars of melody," "an opera without music," "an incoherent mass of rubbish," — are a few of the "critical" opinions passed on this opera, which is now regarded in all countries as a very wonderland of beautiful melodies and expressive harmonies.

The non-acceptance in Dresden of this glorious opera, concerning which Wagner wrote, "It is the best thing I have done so far," was only one of many trials and disappointments which daily harassed him. He was over head and ears in debt, because, in his confidence in the immediate success of his operas, he had had them printed at once, at his own expense. The opera-houses were very slow in accepting them, and this left him in a sad predicament. There were, moreover, enemies everywhere, — ignorant, old-fashioned professionals, who objected to his way of interpreting the masters (though it was afterwards admitted that he was epoch-making as an interpreter of their deepest thoughts). All this galled him; and, furthermore, no attention whatever was paid to his pet plans for reforming the Dresden Opera, and theatrical matters in general.

In the state of mind brought about by this condition of affairs, it needed but a firebrand to start an explosion. This firebrand was supplied by the revolutionary uprising of 1849. Now, although Wagner had never

really cared much for politics (to his friend Fischer he once wrote: "I do not consider true art possible until politics cease to exist"), he was foolish enough to believe that a general overturning of affairs would benefit art-matters, too, and facilitate his operatic reforms; so he became, as he himself admits, "a revolutionist in behalf of the theatre." He actively assisted the insurgents, and the consequence was that, when the rebellion failed, he had to leave Dresden and seek safety in flight.

Three of the leaders of the insurrection — Roeckel, Bakunin, and Heubner; personal friends of Wagner — were captured and imprisoned; he himself was so lucky as to escape to Weimar, where Franz Liszt took care of him. It so happened that Liszt, who had given up his career as concert pianist (though all the world was clamoring to hear him), and was conducting the Weimar Opera, had been preparing a performance of "Tannhäuser," to which Wagner would, under normal conditions, have been invited as a matter of course. He was now there, but as a political fugitive, wherefore it was not deemed advisable to have him attend the public performance; but he did secretly witness a rehearsal, and was delighted to find that Liszt's genius had enabled him to penetrate into the innermost recesses of this music. It was impossible, however, for him to stay any longer. The Dresden police had issued a war-

rant for the arrest of "the royal Kapellmeister Richard Wagner," who was to be "placed on trial for active participation in the riots which have taken place here." No time was, therefore, to be lost. Late in the evening of May 18, Liszt's noble patroness, the Princess Wittgenstein, received this note from him: "Can you give the bearer sixty thalers? Wagner is obliged to fly, and I cannot help him at this moment."

Early the next morning Wagner, provided with a false pass, left Weimar and headed for Switzerland, which was to be his home for the greater part of the following twelve years of his exile from Germany. Had he been caught, like his friends, and, like them, imprisoned during these years, it is not likely that the world would now possess those seven monuments of his ripest genius, "Rheingold," "Die Walküre," "Siegfried," "Götterdämmerung," "Tristan and Isolde," "Die Meistersinger," and "Parsifal." Even as it was, the world has undoubtedly lost an immortal opera or two through his unfortunate participation in the rebellion. For during the first four years of his exile, he did not compose any music. He reasoned that he had written four good operas and nobody seemed to want them; why, therefore, should he compose any more?

At the same time, he realized that there were natural reasons why his operas were not understood. They were written in such a novel style, both vocal and in-

strumental, that the singers, players, and conductors found it difficult to perform them correctly, the consequence being that they did not specially impress the audiences, which, moreover, were bewildered by finding themselves listening to works so radically different from what they had been accustomed to in the opera-houses. In the hope of remedying this state of affairs Wagner devoted several years to writing essays, in which he explained his aims and ideals for the benefit both of performers and listeners. Little attention was, however, paid to these essays, and although they are valuable æsthetic treatises, most lovers of Wagner would gladly give them for the operas he might have written in the same time, — operas uniting the characteristics of "Lohengrin" and "The Valkyrie."

Wagner's letters to Liszt and other friends show that he suffered tortures, and was often brought to the verge of suicide by the thought that, as a political refugee, he was unable to go to Germany to superintend the production of his works. His one consolation was that, as he put it, through the friendship of Liszt his art had found a home at Weimar at the moment when he himself became homeless. Weimar became, as it were, a sort of preliminary Bayreuth, to which pilgrimages were made to hear Wagner's operas. Liszt not only produced the "Flying Dutchman," "Tannhäuser," and "Lohengrin," but wrote eloquent essays on them, and

in every possible way advanced the good cause. It has been justly said that by his efforts he accelerated the vogue of Wagner's operas fully ten years. He also helped him pecuniarily, and induced others to do the same. Never in the world's history has one artist done so much for another as Liszt did for Wagner during all the years of his exile in Switzerland.

Few persons would consider residence in Switzerland (the usual home in those days of political refugees) a special hardship; nor would Wagner have considered it in that light except for the solicitude he felt for the children of his brain. Otherwise he greatly enjoyed life in that glorious country, and the Alpine ozone nourished and stimulated his brain. Moreover, from the creative point of view, it was an actual advantage for him to be away from the opera-houses of the great capitals. In Switzerland, except for a short time when he was connected with the Zürich opera, he heard no operatic music except such as his own brain created. Undoubtedly this helps to account for the astounding originality of the music-dramas he wrote in Switzerland.

These music-dramas go as far beyond "Lohengrin" in certain directions as "Lohengrin" goes beyond the operas of Wagner's predecessors. It was a reckless thing to do, to make another such giant stride before the world had caught up with his first, and he had

to suffer the consequences; but genius disregards prudence, and looks to the future alone. What he was now writing was what his enemies tauntingly called "the music of the future," because, as they said, nobody liked it at present; but what he himself called the "art work of the future," in which all the fine arts are inseparably united.

The biggest of his works, the "Nibelung Tetralogy," was conceived and for the most part written in Switzerland. Before leaving Dresden he had already written the poem of an opera which he called "Siegfried's Death." Returning to this in his exile he came to the conclusion, gradually, that the legend on which it is based, and which he had sketched out in prose at the beginning, contained the material for two, three, nay, four operas. Accordingly, he wrote the poems of these: first, "Götterdämmerung," then "Siegfried," "Die Walküre," and "Rheingold." The music to these four dramas was, however, composed in the reverse order, in which they were to be performed.

Wagner indulged in no illusions regarding these music-dramas. He knew that they were beyond the capacity of even the best royal opera-houses of that time, and that they could be performed only under exceptional conditions, such as he finally succeeded, after herculean efforts and many disappointments, in securing at Bayreuth in 1876. It is of great interest to note

that the germs of a sort of "Bayreuth festival plan" can be found in his letters as early as 1850, — the year when "Lohengrin" had its first hearing. Thus a full quarter of a century elapsed between the conception of this festival plan and its execution. But Wagner had the patience of Job, as well as his capacity for suffering.

Amid privations of all sorts, he wrote the sublime music of these dramas, beginning with "Rheingold," on Nov. 1, 1853, — the first time he had put new operatic melodies on paper since the completion of "Lohengrin," in August, 1847. In his head, to be sure, he had been carrying much of the Nibelung music for some time, for he habitually created his leading melodies at the same time as the verse; and the four Nibelung poems were in print in 1853. On May 28, 1854, the score of "Rheingold" was completed, and four weeks later he began the sketches of "The Valkyrie," the completed score of which was in his desk by the end of March, 1856.

In the meantime his poverty had compelled him, much against his wishes, to accept an offer from the London Philharmonic Society to conduct their concerts for a season (March to June, 1855). He had reason to bitterly regret this action. With the limited number of rehearsals at his command it was impossible for him to make the orchestra follow his intentions and reveal

his greatness as a conductor. He was not allowed to make the programmes, and the directors, ignorant of the fact that they had engaged the greatest musical genius of the century, gave no Wagner concert, and put only a few short selections from his early operas on the programs. Thus his hopes of creating a desire for the hearing of his complete operas, which had been one of his motives in going to London, were frustrated. He was, moreover, constantly abused for doing things differently from Mendelssohn, and the leading critics referred to his best music as "senseless discord," "inflated display of extravagance and noise," and so on. Almost the only pleasant episode was the sympathy and interest of Queen Victoria, who had a long talk with him, and informed him that his music had enraptured her.

For all this trouble and loss of time (he found himself unable in London to do any satisfactory work on the uncompleted "Valkyrie" score), he received the munificent sum of $1,000, — considerably less than many Wagner singers to-day get for one evening's work. Shortly before leaving London he wrote to a friend that he would bring home about 200 francs, — $40! For this he had wasted four months of precious time and endured endless "contrarieties and vulgar animosities," to use his own words.

Equally unsuccessful were his efforts, a few years

later, to better himself financially by a series of concerts in Paris (1860). They resulted in a large deficit. Nor was he benefited by the performances of his "Tannhäuser," which were given at the grand opera in March, 1861, by order of Napoleon, at the request of the influential Princess Metternich. He had refused to interpolate a vulgar ballet in the second act for the benefit of the members of the aristocratic Jockey Club, who dined late and insisted on having a ballet on entering the opera-house. They took their revenge by creating such a disturbance every evening that after the third performance Wagner refused to allow any further repetitions, although the house on the third night had been completely sold out. He was to receive $50 for each performance. The result was $150, or less than 50 cents a day, for a year's hard work and no end of worry in connection with the rehearsals.

How many men are there in the annals of art who would have refused, after all these disappointments and bitter lessons, to make *some* concessions? Wagner was writing a gigantic work, the Nibelung Tetralogy, which, he was convinced, would never yield a penny's profit during his lifetime. Sometimes despair seized him. In one of his letters he exclaims: "Why should I, poor devil, burden and torture myself with such terrible tasks, if the present generation refuses to let me have even a workshop?" Yet the only deviation

he made from his plan was that when he had reached the second act of the third of the Nibelung dramas, the poetic "Siegfried," in June, 1857, he made up his mind to abandon the Tetralogy for the time being, and compose an opera which might be performed separately and once more bring him into contact with the stage.

This opera was "Tristan and Isolde;" but instead of being a concession, it turned out to be the most difficult and Wagnerian of all his works, — an opera with much emotion but little action, no processions or choruses such as "Lohengrin" still had, and, of course, no arias or tunes whatever. "Tristan and Isolde" was completed in 1859, and Wagner would have much preferred to have its performance in Paris commanded by Napoleon in place of "Tannhäuser." What the Jockey Club would have done in that case is inconceivable, for, compared with "Tristan," "Tannhäuser" is almost Meyerbeerian, if not Donizettian. No singers, moreover, could have been found in Paris able to interpret this work, with its new vocal style, — "speech-song," as the Germans call it. Even Germany could do nothing, at first, with this opera. In Vienna, after fifty-four rehearsals, it was abandoned, in 1863, as "impossible," and that city did not produce it till after Wagner's death. Instead of bringing him into immediate contact with the stage, it was not heard *anywhere* till seven years after its completion.

There was one more card for him to play. All his operas, so far, had been tragedies. What if he were to write a comic opera? Would not that be likely to get him access to the stage again, and help him financially? He had the plan for a comic opera; indeed, he had sketched it as early as 1845, at the same time as the plot of "Lohengrin." Sixteen years it lay dormant in his brain. At last he wrote out the poem in Paris, immediately after the "Tannhäuser" disaster there. Perhaps it would be more accurate to call "Die Meistersinger" a humorous opera; for while the story of the mediæval knight who wins the goldsmith's daughter has comic features, its chief characteristic is humor, with that undercurrent of seriousness that belongs to all masterpieces of humor. To a certain extent, it is a musical and poetic autobiography, the victorious young Knight Walter, who sings as he pleases, without regard to pedantic rules, representing Wagner himself and the "music of the future," while the vain and malicious Beckmesser stands for the critics, and Hans Sachs for enlightened public opinion.

It was during the time that he wrote the gloriously melodious and spontaneous music to this poem that the most important event of his life happened. Work on the score was repeatedly interrupted by the necessity of making some money. Most of his concerts in German cities, undertaken for this purpose, did not yield

him any profits. In Russia, however, he was very successful, and as he had the promise of a repetition of his success, he rented a fine villa at Penzing, near Vienna, and proceeded to enjoy life for a change. Who can blame him for this? As he said to a friend not long after this, "I am differently organized from others, have sensitive nerves, must have beauty, splendor, and light. Is it really such an outrageous thing if I lay claim to the little bit of luxury which I like, — I, who am preparing enjoyment for the world and for thousands?"

Unfortunately the second Russian project failed, through no fault of his own, and as he had borrowed money at usurious rates on his expected profits, he found himself compelled to fly once more from his creditors. After spending a short time in Switzerland, he went to Stuttgart, where he persuaded his friend Weissheimer to go with him into the Suabian Alps, where he intended to hide for half a year, until he could finish his "Meistersinger," and with the score raise money for his creditors. The wagon had already been ordered for the next morning, May 3, 1864, and Wagner was packing his trunk, when a card was brought up to him with the inscription: "von Pfistenmeister, Secrétaire aulique de S. M. le roi de Bavière," and the message that the Baron came by order of the King of Bavaria, and was very anxious to see him.

King Ludwig II. of Bavaria had declared, while he was still crown prince, that as soon as he became king he would show the world how highly he held the genius of Wagner in honor. He kept his word. One of his first acts was to despatch Baron von Pfistenmeister to search for Wagner, and not to return without him. He was to tell him that the king was his most ardent admirer; that he wanted him to come at once to Munich, to live there in comfort, at the king's expense, to complete his Nibelung operas, and produce them forthwith. Was it a wonder that when the Baron had left, Wagner, who was thus suddenly raised from the depth of despair (he had even meditated suicide) to the height of happiness, fell on Weissheimer's neck, and wept for joy.

Surely the brain of a Dumas could not have conceived a more romantic event than this sudden transformation of one who was a fugitive from debtor's prison into the favorite of a young and enthusiastic king. At last Wagner had an opportunity to bring forward his music-dramas. "Tristan and Isolde" was sung at the Munich Opera on June 10, 1865, with an excellent cast, and Hans von Bülow as conductor. "Die Meistersinger" followed on June 21, 1868. Both these works were received with enthusiasm by the ever-growing band of Wagner-lovers. His plan of building a special theatre in Munich for the perfor-

mance of his Nibelung operas could not be carried out, however, even with the king's aid; for his great influence with the king (he was rumored to be even his political and religious adviser, though this was not true), aroused so much hostile feeling that Wagner finally decided to have his Nibelung festival at the old secluded town of Bayreuth.

At the suggestion of the eminent pianist, Carl Tausig, Wagner societies were formed in the cities of Europe and America to raise funds for this festival and give Wagner a chance to establish a tradition by showing the world how his operas should be performed. With the aid of these and liberal contributions by his ever-devoted king, Wagner was able, after many trials, tribulations, and postponements, to bring out, at last, his great Tetralogy, on August 13, 14, 16, and 17, of the year 1876. It was beyond comparison the most interesting and important event in the whole history of music. Wagner had personally visited the opera-houses throughout the land and selected the best singers. The audience included the Emperors of Germany and Brazil, King Ludwig, the Grand Dukes of Weimar and Baden, eminent composers like Liszt, Grieg, Saint-Saëns, and many other notable persons. The impression made by the great work was the deeper because of the unusual circumstances: the theatre specially constructed after Wagner's novel plan; the amphitheatric seats; the on-

cealed orchestra; the stereoscopic clearness and nearness of the stage scenes, etc.

The necessity of charging very high rates ($225 for the four dramas) naturally prevented the audiences from being large, and the result was that Wagner had a deficit of $37,000 on his hands as the reward for his genius and years of business worries. When, however, his last work, the sublime, semi-religious "Parsifal," was produced in 1882, there was a balance in his favor. He was then in his sixty-ninth year, and the exertion of producing this final masterpiece was too great for him. To recuperate, he went to Venice, where he died on Feb. 13, 1882. King Ludwig sent a special train to convey his body to Bayreuth, where it was buried in the garden behind his villa Wahnfried.

Since Wagner's death the Bayreuth festivals have been kept up with ever-increasing success, under the guidance of his widow Cosima, the daughter of Liszt (whom he married in 1870, four years after the death of his first wife), and their son, Siegfried, who has in recent years also won some success as an opera composer. The performances at Bayreuth are no longer what they were during Wagner's lifetime, — models for all the world; but they are still of unique interest. In truth, headquarters like Bayreuth are no longer needed, for all the German cities now vie with one another in their efforts to interpret the Wagner operas according to the

composer's intentions; and his influence on other musicians, which began with the performance of "Lohengrin" under Liszt, in 1850, is to-day greater than ever, — more powerful, perhaps, than that ever exerted by any other master.

But while an eminent German critic wrote not long ago that "the music-drama of Wagner constitutes modern opera," it would be a huge mistake to make Wagnerism synonymous with modern music in general. Apart from the opera, there are several other very powerful currents, and while most of them can be traced to the first half of the nineteenth century, they are none the less modern. Their principal sources are Beethoven, Schubert, and Chopin, to whom we must add, in the second half of the century, Liszt.

The symphonies of Haydn and Mozart are like toy-houses compared with the massive architecture of Beethoven's. He not only elaborated the forms, but varied the rhythms, broadened the melody, and deepened the expression of orchestral music. In his works, too, are to be found the germs of romanticism, which others, notably Mendelssohn and Schumann, developed so fascinatingly in their best works. Most of Mendelssohn's compositions have had their day; but Schumann is still a force in modern music and will long remain so.

Brahms, the musical Browning, is, musically speaking, a son of Schumann and a grandson of Beethoven.

While even Brahms did not escape the influence of Wagner, nor that of the romanticists Schubert and Chopin, still, in his essence, he represents reaction against modern romanticism and an atavistic return to the spirit of Beethoven. He has been, for decades, the idol of Wagner's enemies; yet, in truth, there was no occasion for opposing these two men, since they worked in entirely different fields. Brahms wrote no operas, while Wagner wrote little but operas. The real antagonist of Brahms is Liszt, who also worked only for the concert hall and who represents poetic or pictorial music (programme music), while Brahms stands for absolute music, or music *per se*, without any poetic affiliations.

While Schubert in his youth also came under the influence of his great contemporary, Beethoven, he soon emancipated himself completely from him, even in the symphony, in which, as Schumann pointed out, he opened up "an entirely new world" of melody, color, and emotion. His orchestration is more varied, euphonious, and enchanting than Beethoven's, and in this direction he did for the symphony what Weber did for the opera. By using the brass instruments pianissimo, for color instead of for loudness, he opened a path in which later masters, including Wagner, eagerly followed him. Schubert was also the first composer who revealed the exquisite beauty and the great emotional power of

the freest modulation from key to key. His poetic impromptus for piano became the model for Mendelssohn's "Songs without Words," and the multitudinous forms of modern short pieces, while his melodious, dainty, graceful valses were the forerunners of the exquisite dance-music which subsequently made Vienna famous, and which reached its climax in Johann Strauss the younger, universally known as "the waltz king."

In all these respects, Schubert was epoch-making; and if the beautiful details he suggested to his successors up to the present day could be taken out of their works there would be some surprising blanks. Especially also is this true in the realm of lyric song, for, as everybody knows, he practically created the art song as we know and love it. The greatest of his immediate successors, Schumann and Franz, cheerfully admitted that they could never have written such songs as they gave the world but for Schubert, and the same confession might be made by the latest of the great song-writers, Grieg, Richard Strauss, and our American MacDowell. Schubert's best songs have never been equalled. They belong in the realm of modern music quite as much as Wagner's music-dramas and Liszt's symphonic poems.

Chopin is another composer who, although he died in 1849 (Schubert died in 1828), is as modern as the masters just named. He was as boldly original as Schu-

bert, and as great a magician in the art of arousing deep emotion by means of novel, unexpected modulations. As an originator of new harmonic progressions he has had only three equals, — Bach, Schubert, and Wagner. Harmonies as ultra-modern as those of Wagner's "Parsifal" may be found in some of the mazurkas of Chopin. He was, as Rubinstein called him, "the soul of the pianoforte." No one before or after him knew how to make that instrument speak so eloquently. By ingeniously scattering the notes of a chord over the keyboard while holding down the pedal, he practically gave the player three or four hands, and greatly enlarged the harmonic and coloristic possibilities of the pianoforte. Liszt, Rubinstein, Paderewski, and others have gone farther still in the same direction, but he showed the way, and most of his pieces are as delightful and as modern now as they were on the day when they were written. He wrote a few sonatas, but the majority of his works are short pieces such as are characteristic of the modern romantic school.

Before Chopin modernized pianoforte music the world's greatest composers had been Italians, Germans, and Frenchmen. Chopin's father was a Frenchman, but his mother was a native of Poland, and he was born in that country. While his music has the French qualities of elegance and clearness (which every one admires in the works of Gounod, Bizet, Massenet, and

other Parisian masters), in its essence it is Polish — a fact of special significance, for from this time on other nations than the three mentioned — especially the Slavic and Scandinavian — begin to play a prominent rôle in music. In this brief sketch only the greatest names can be considered, — such names as Rubinstein, Tschaikowsky, Dvořák, Grieg.

Rubinstein was not only one of the greatest pianists, but one of the most spontaneous and fertile melodists of all times. His frequently careless workmanship and his foolish, savage hostility to the dominant Wagner movement prevented him from enjoying the fruits of his rare genius. He felt that, had it not been for the all-absorbing Wagner, he himself might have been as popular as Mendelssohn. Although a Russian, there is little local color in his music, for the enchanting exotic melodic intervals in his "Persian" songs are Oriental in general, rather than Russian in particular. Similar exotic intervals may be found in the "Aïda" of Verdi, a pure Italian. Rubinstein, like Mendelssohn and Meyerbeer, was a Hebrew. His day will yet come, for his Dramatic and Ocean symphonies are among the grandest orchestral works in existence.

His countryman, Tschaikowsky, also was neglected during his lifetime; but since his death he has become, especially in London, almost as popular as Wagner; and deservedly so, for he was a genius of the highest

type, less in his songs and pianoforte works than in his symphonies and symphonic poems, which include some of the most inspired pages in modern music. In some of his compositions there is a barbaric splendor which proclaims the Russian and delights those who like exotic novelty in music. Like all the Russians, Tschaikowsky was strongly influenced by Liszt; indeed, it may be said that in Russia Liszt was more potent in shaping the course of modern music than even Wagner.

Another Slavic composer, the Bohemian Dvořák, is of special interest to Americans not only because he is one of the greatest of modern orchestral writers (a colorist of rare charm), but because he presided for several years over Mrs. Thurber's National Conservatory of Music in New York, and there wrote that truly melodious and deeply emotional work, "From the New World," which has become almost as popular as Tschaikowsky's "Pathétique." His Bohemian rhythms have a unique charm.

Among the Scandinavian composers the greatest, by far, is Grieg, one of the most original melodists and harmonists of all times. His songs, in particular, are destined to immortality; they are among the very best written since Schubert. Of his pianoforte and chamber music, too, it can be said that everything is new, free from commonplace, and ultra-modern. He has written

mostly short pieces, and for that reason has had to wait (like Chopin in his day) a long time for full recognition of his genius, the critics not having yet got over the foolish habit of measuring art-works with a yard-stick. Like Chopin, moreover, Grieg has had the ill-fortune of having his most original and individual traits accredited to his nation and described as "national peculiarities." His music does contain such peculiarities; but it is necessary to distinguish between what is Norwegian and what is Griegian. Grieg's little pieces and songs are big with genius.

The Hungarian Liszt is another immortal master who, beside the fruits of his individual genius, contributed to the current of modern music some of those exotic national traits which distinguish it from that of earlier epochs when it was almost exclusively Italian, French, and German. His fifteen Hungarian rhapsodies constitute, however, only a small part of the invaluable legacy he has left the world. He was the most many-sided of all musicians, — the greatest of all pianists, and one of the best composers of oratorios, songs, orchestral, and pianoforte works, — everything, in short, except operas and chamber music. He was also the greatest of teachers and (with the exception of Wagner) the greatest of conductors; as such, he carried out both his own and Wagner's new and revolutionary principles of interpretation, which have gradually made the or-

chestral conductor a personage of even greater importance, in concert hall and opera-house, than the prima donna, travelling, like her, from city to city, to delight lovers of music.

One might have expected that the prince of pianists, being at the same time a composer, would do for the pianoforte what Bach had done for choral and organ music, Beethoven for the symphony, Schubert for the art song, and Wagner for the opera. But he could not, for Chopin had anticipated him. In only one direction was it possible to go beyond Chopin, — in that of making the piano capable of reproducing orchestral effects. This, Liszt achieved in his own works and his transcriptions. But, after all, the grandest pianoforte, while delightful as such, is but a poor substitute for an orchestra. Hence it was natural that Liszt should give up the pianoforte as his specialty and devote himself particularly to the orchestra.

In this domain he was destined to achieve reforms similar to those of Wagner in the opera. The "classical" symphony, like the old-fashioned opera, consists of detached numbers, or movements, that have no organic connection with one another. For the detached numbers of the opera Wagner substituted his "continuous melody;" and he provided an organic connection of all the parts by means of the "leading motives" or characteristic melodies and chords which

recur whenever the situation calls for them. In the same spirit Liszt transformed the symphony into the symphonic poem, which is continuous and has a leading motive uniting all its parts.

There is another aspect to the symphonic poem, in which Liszt deviated from Wagner. In Wagner's operas there is plenty of descriptive or pictorial music, but no program music, properly speaking; for even in such things as the Ride of the Valkyries, or the Magic Fire Scene, the music does not depend on a programme, but is explained by the scenery. In programme music, on the other hand, the scene or the poetic idea is simply explained in the programme, or else merely hinted at in the title of the piece. Crude attempts in this direction were made centuries ago, but programme music as an important branch of music is a modern phenomenon. Beethoven encouraged it by his "Pastoral Symphony," and the French Berlioz did some very remarkable things in this line in his dramatic symphonies; but it remained for Liszt to hit the nail on the head in his symphonic poems. The French Saint-Saëns followed him, rather than his countryman Berlioz; so did Tschaikowsky, Dvořák, and most modern composers, up to Richard Strauss, whose symphonic poems are the most widely discussed, praised, and abused compositions of our time.

To the great names contained in the preceding para-

graphs another must be added, — that of an Italian. By an odd coincidence, Verdi was born in the same year as Wagner, 1813. But what is far more remarkable is that at the close of their careers, so different otherwise, these two great composers met again — in their music, Verdi as a Wagnerian convert. Up to his fifty-eighth year Verdi had written two dozen operas, all made up of strings of arias in the old-fashioned way, — superb arias, many of them, especially in "Il Trovatore" and "Aïda," but still arias. Then he rested from his labors sixteen years; and when he appeared on the stage again, with his "Otello" and "Falstaff," he had adopted Wagner's maxims that arias are out of place in a music-drama; that "the play 's the thing," and that the music should follow the text word for word.

Surely, this was the most remarkable of Wagner's triumphs and conquests. He who had been denounced for decades as being unable to write properly for the voice was actually taken up as a model by the greatest composer of Italy, the land of song. Moreover, all the young composers of Italy have turned their backs on the traditions of Italian opera. The chief ambition of Mascagni, Leoncavallo, Puccini, and all the others has been to be called "the Italian Wagner;" and their operas are much more like Wagner's than like Rossini's and Donizetti's, being free from arias and the vocal embroideries that formerly were the essence of Italian opera. The

same is true of the operas written in recent decades in France, Germany, and other countries. Massenet, Saint-Saëns, Humperdinck, Goldmark, Richard Strauss, Paderewski, and all the others have followed in Wagner's footsteps.

Such, briefly told, is the story of Richard Wagner and Modern Music. The "music of the future" has become the music of the present. What the future will bring no one can tell. Croakers say, as they have always said, that the race of giants has died out. But who knew, fifty years ago, that Wagner and Liszt, or even their predecessors, Chopin and Schumann, and the song specialist, Robert Franz, were giants? We know it now, and future generations will know whether we have giants among us. Things of beauty that will be a joy forever have been created by men of genius now living in Europe; such men as the Norwegian Grieg, the Bohemian Dvořák, the French Saint-Saëns and Massenet, the Hungarian Goldmark, the German Humperdinck and Richard Strauss, the Polish Paderewski. England has more good composers and listeners than it ever had before; and the same is true of America. We have no school of opera yet, but the best operettas of Victor Herbert and De Koven deserve mention by the side of those of the French. Offenbach, Lecocq, and Audran, the Viennese Strauss, Suppé, and Milloecker, the English Sullivan. The orchestral compositions of our

John K. Paine are masterworks, and the songs and pianoforte pieces of MacDowell are equal to anything produced in Europe since Chopin and Franz. We have several other men of great promise, and altogether the outlook for America, as well as for Europe, is bright.

AUTHORITIES.

The books, pamphlets, and newspaper articles on Wagner would fill a library. He has been more written about than any writers except Shakspere, Goethe, and Dante. He was also fond of writing about himself. His autobiography (extending only to 1865) has not yet been given to the public ; but there are many autobiographic pages in the ten volumes of his literary works, which have been Englished by Ellis. Of great value are Wagner's letters to Liszt and to other friends. These were utilized for the first time in "Wagner and His Works," the most elaborate biography in the English language, by the author of the foregoing article. Shorter American and English books on Wagner have been written by Kobbé, Krehbiel, Henderson, Hueffer, Newman, &c. Of French writers Lavignac, Jullien, Mendès, Servières, Schuré, may be mentioned. Of great value are Kufferath's monographs on the Wagner operas and Liszt's analyses. In Germany the standard work of reference is the third edition of Glasenopp, in six volumes, four of which are now (1902) in print. Other German writers are Porges, Wolzogen, Pohl, Nohl, Tappert, Chamberlain, &c. The best histories of Modern Music in general are Langhaus's larger work and Riemann's "Geschichte der Musik seit Beethoven." The best general work for reference is "Great Composers and Their Works," edited by Professor Paine of Harvard. References to about 10,000 articles on Wagner may be found in Oesterlein's "Katalog Einer Richard Wagner Bibliothek," 3 vols.

JOHN RUSKIN.

1819–1900.

MODERN ART.

JOHN RUSKIN.

MODERN ART.

By G. MERCER ADAM.

WHAT John Ruskin has done in a prosaic, commercial, and Philistine age, in teaching the world to love and study the Beautiful, in opening to it the hidden mysteries and delights of art, and in inciting the passion for taking pleasure in and even possessing embodiments of it, that age owes to the great prose-poet and enthusiastic author of "Modern Painters." Neither before nor since his day has literature known such a passionate and luminous exponent of Nature's beauties, such an inculcator in men's minds of the art of observing her ways and methods, or one who has given the world such deep insight into what constitutes the true and the beautiful in art. For these things, and for opening new worlds of instruction and delight to his age in the realm of art, heightened by the charm of his marvellous prose, we can readily pardon Ruskin for his weaknesses and perverseness,— for his dogmatisms, his fervors, and ecstasies, his

exaggerations of praise and blame, and even for the missionary propagation of his often unsound economic gospel, valuable though it may be in illustrating and enforcing morality in its æsthetic aspect. Despite his enemies, and all that the critics have said contradicting his theories, Ruskin was a surprise and a revelation to his time. In not a little of all that he said and did, it is true, we cannot concur; nor can we fail to see the errors he fell into through his want of reserve and his headlong haste to say and do the things he said and did; nevertheless, he was a great and inspiring teacher in things that appeal to our sense of the beautiful, and earnest in his zeal to raise men's intellectual and moral standard of life. Like most enthusiasts and geniuses, he had, now and then, his hours of reaction, waywardness, and gloom; but there was much that was noble and ennobling in the man, as well as rich and fructifying in his thought. Even in his social and moral exhortations, tinctured as they are with mediævalism, and however much we may here again disagree with him, he had much that was uplifting and inspiring to say to his time, — a time that had great need of his apostolic counsellings and his fervent inculcations of morality, industry, religion, and humanity.

Throughout Mr. Ruskin's works — and they are amazingly manifold — a strong and intense purpose runs, given to the highest and noblest ends; and though their author

at times wearies his reader by his diffuseness and his digressions, and to some is almost fanatical in his reverence for art, he is ever imaginative and eloquent, and has created for us a new, instructive, and uniquely fresh and thoughtful body of art-literature. The truth of infinite value he teaches is "realism," — the doctrine that all truth and beauty are to be attained by a reverent and faithful study of nature, and not, as a reviewer expresses it, "by substituting vague forms, bred by imagination on the mists of feeling, in place of definite, substantial reality. The thorough acceptance of this doctrine would remould our life; and he who teaches its application, even to any single department of human activity, and with such power as Mr. Ruskin's, is a prophet for his generation." In all his various labors and aims, Mr. Ruskin set before himself a high, if somewhat quixotic, ideal of life, and with great earnestness did much, not only for the elevation of his fellow-men, but for the development of sound artistic taste and the enriching and spiritualizing of life by seeking to surround it at all times with the true and the beautiful, and with the old-time virtues of purity, manliness, and courage.

Among the "Beacon Lights" of the age there can be no question that Ruskin is worthy of an exalted place, since few men of our modern time, rich as it is in eminent thinkers and writers, has done more than he to illumine the many subjects with which he has so fascinatingly

dealt, — and that not only in art and its cult of the Beautiful, but in ethics, education, and political economy. The energies, activities, and impulses he constantly put forth, as well as the high principles that ever guided him in his earnest endeavor to improve the intellectual and moral condition of his kind, mark his era as a great artistic epoch in the onward and upward progress of the race. By stimulus, suggestion, and inspiration he has powerfully influenced his time, though manifestly not a little of the seed he abundantly and hopefully scattered has fallen upon barren ground. Nevertheless, where the seed has fallen and germinated, the yield has been large: "his spirit has passed far wider than he ever knew or conceived; and his words, flung to the winds, have borne fruit a hundredfold in lands that he never thought of or designed to reach." With what pride and gratitude should not the age regard him and his memory, — one who has quickened the sensibilities of men in looking upon nature; opened our dull eyes to its manifold beauties; made plain to the average intelligence what Art is and stands for; implanted in our souls worship of the beautiful; shown workingmen how to use their tools in the highest interests of their craft, and taught maidens what and how to read as well as how and in what spirit to sew and cook. The world too often acknowledges its true teachers and prophets only when it begins to build them some belated tomb. "This, at

any rate," gratefully exclaims Frederic Harrison,[1] "we will not suffer to be done to John Ruskin."

"We may all of us recall to-day with love and gratitude the enormous mass of stirring thoughts and melodious speech about a thousand things, divine and human, beautiful and good, which for a whole half-century the author of 'Modern Painters' has given to the world. They cover every phase of nature, every type of art, of history, society, economics, religion; the past and the future; all rules of human duty, whether personal or social, domestic or national. . . . He spake to us of trees, from the cedar of Lebanon unto the hyssop on the wall; he spake also of beasts, and of fowl, and of creeping things, and of fishes. He has put new beauty for us into the sky and the clouds and the rainbow, into the seas at rest or in storm, into the mountains and into the lakes, into the flowers and the grass, into crystals and gems, into the mightiest ruins of past ages, and into the humblest rose upon a cottage wall. He has done for the Alps and the cathedrals of Italy and France, for Venice and Florence, what Byron did for Greece. We look upon them all now with new and more searching eyes. Whole schools of art, entire ages of old workmanship, the very soul of the Middle Age, have been revealed with a new inspiration and transfigured in a more mysterious light. Poetry, Greek sculpture, mediæval worship, commercial morality, the training of the young, the nobility of industry, the purity of the home,—a thousand things that make up the joy and soundness of human life have been irradiated by the flashing searchlight

[1] Written by Mr. F. H. on Professor Ruskin's eightieth birthday (February 8, 1899).

of one ardent soul: irradiated, let us say, as this dazzling ray shot round the horizon, glancing from heaven to earth, and touching the gloom with fire. We need not, even to-day, be tempted from truth, or pretend that the light is permanent or complete. It has long ceased to flash round the welkin, and its very scintillations have disturbed our true vision. But we remember still its dazzling power and its revelation of things that our eyes had not seen.

"What we especially love to dwell on to-day is this: that in all this unrivalled volume of printed thoughts, in this encyclopædic range of topic by this most voluminous and most versatile of modern writers [may we not say of all English writers?] there is not one line that is base, or coarse, or frivolous; not a sentence that was framed in envy, malice, wantonness, or cruelty; not one piece that was written to win money, or popularity, or promotion; not a line composed for any selfish end or in any trivial mood. Think what we may of this enormous library of print, we know that every word of it was put forth of set purpose without any hidden aim, utterly without fear, and wholly without guile; to make the world a little better, to guide, inspire, and teach men, come what might, scoff as they would, turn from him as they chose, though they left him alone, a broken old man crying in the wilderness, with none to hear or to care. They might think it all utterly vain; we may think much of it was in vain: but it was always the very heart's blood of a rare genius and a noble soul."

Before entering, somewhat in detail, into Ruskin's vast and varied labors, let us briefly outline the scope and character of the work which gave the art critic and

prophet of his time his chief fame. The personal incidents in his life need not detain us at the outset, as they are not specially eventful, and may be more fully gathered from the excellent "Life" of Ruskin, by his friend and some-time secretary, W. G. Collingwood, or from the delightfully interesting reminiscences by the master himself in his autobiographic "Præterita," published near the close of his long, arduous, and fruitful career. John Ruskin was born in London on the 8th of February, 1819. He was of Scotch ancestry, his father being a prosperous wine merchant in London, who acquired considerable wealth in trade, which the son in time inherited, and nobly used in his many private benevolences and philanthropic enterprises. The comfortable circumstances in which he was born, coupled with his father's own love of pictures and books, were helpful in giving encouragement and direction to the young student's studies and tastes. His mother, a deeply religious woman, was, moreover, influential in implanting the serious element in Ruskin's character and life, and in familiarizing him with the Bible, whose noble English, in King James' version, manifestly entered early into the youth's ardent, prophetic soul, and, as a writer, had much to do in forming his magnificent prose style. Ruskin was in early years — indeed, far on in his manhood — in delicate health, and consequently he was educated privately till

he passed to Christ Church College, Oxford, where, at the age of twenty, he won the Newdigate prize for verse, and graduated in 1842. His taste for art was manifested at an early age, and after passing from the university he studied painting under J. D. Harding and Copley Fielding; but his masters, as he tells us in "Præterita," were Rubens and Rembrandt.

At the outset of his career Ruskin, as is well known, was led to take up a defence of J. M. W. Turner (1775–1851) and the contemporary school of English landscape-painting against the foreign trammels, which had fastened themselves upon modern art, and especially to prove the superiority of modern landscape-painters over the old masters. This revolutionary opinion, though at first it was hotly contested, established the new critic's position as a writer on art, and the defence, or exposition rather, grew into the famous work called "Modern Painters" (5 vols., 1843–60). This elaborate work deals with general æsthetic principles, and, notwithstanding its occasional extravagances, alike of praise and censure, its charm is irresistible, presenting us with its brilliant and original author's ideas of beauty, to which he freshly and powerfully awakened the world, while enshrining throughout the work the most enchanting word-poems on mountain, leaf, cloud, and sea, which, it is not too much to say, will live forever in English literature. In the second volume Mr. Ruskin

takes up the Italian painters, and discusses at length the merits of their respective schools; in the others, as well as in the work as a whole, we have a body of principles which should govern high art-work, as well as new ideas as to what should constitute the equipment of the painter, and that not only as regards the technique of his art, but in the effect to be produced on the onlooker in viewing the skilled work of one who, above all accomplishments, should be lovingly and intimately in contact with nature.

From the study of painting Mr. Ruskin passed for a time to that of architecture. In this department we have from his pen "The Seven Lamps of Architecture" (1849) and "The Stones of Venice" (1851–53). In these two complementary works their author sets forth as in an impressive sermon the new and admonitory lesson that architecture is the exponent of the national characteristics of a people, — the higher and nobler sort exemplifying the religious life and moral virtue in a nation, the debased variety, on the other hand, expressing the ignoble qualities of national vice and shame. The text of "The Stones" is Venice, and the design of the volumes, in the author's words, is to show that the Gothic architecture of Venice "had arisen out of, and indicated, a state of pure domestic faith and national virtue;" while its renaissance architecture "had arisen out of and indicated a state of concealed national

infidelity and domestic corruption." The earlier work, "The Seven Lamps," — the Lamp of Sacrifice, of Truth, Power, Beauty, Life, Memory, Obedience, — looks upon architecture "as the revealing medium or lamp through which flame a people's passions, — the embodiment of their polity, life, history, and religious faith in temple and palace, mart and home." Akin to these two eloquent works, in which their author thoughtfully sets forth the civic virtues and moral tone, as well as the debased characteristics, by which architecture is produced at certain eras in a people's life, is the earlier volume on "The Poetry of Architecture" (1837), which discusses the relation between architecture and its setting of landscape or other environment, illustrated by examples drawn from regions he had visited, — the English Lakeland, France, Switzerland, Spain, and northern Italy.

After these works followed lectures on drawing, perspective, decoration, and manufacture, with later theories (crotchets, some have impiously called them) on political economy, Pre-Raphaelitism, *et cetera*, with a flood of opinions on social, ethical, and art subjects, enriched by rare intellectual gifts and much religious fervor. Ruskin's whole writings form a body of literature unique of its kind, pervaded with great charm of literary style, and inspired by a high moral purpose. Ruskin's excursions into non-æsthetic fields, and the

strange jumble of Christian communism to which, late in life, he gave vehement expression, it must be honestly admitted, have detracted much from his early fame. In everything he wrote the Ruskinian spirit comes strongly out, colored with an amiable egotism and enforced by great assurance of conviction. The moral purpose he had in view, and the charm and elevated tone of his writings, lead us to forget the wholly ideal state of society he sought to introduce, while we are won to the man by the passion of his noble enthusiasms.

Like Carlyle and Emerson, Ruskin was by his parents intended for the ministry; but for the ministry he had himself no inclination. The broadening out early of his mind and the freeing of his thought on doctrinal subjects, which took him far from the narrow evangelicalism of his youth, made the ministry of the church repugnant to him, though he was always a deeply religious man and a force ever making for righteousness. At the same time, he numbered many divines among his most cherished friends, and he frequently, and with admitted edification, was to be found in chapel and church. Meanwhile he continued busily to educate himself for whatever profession he might choose or drift into, supplemented by such fitful periods of schooling as his delicate health permitted, as well as by many jaunts with his parents to the English lakes and other parts of the kingdom, and by fre-

quent tours on the Continent, especially in Italy and Switzerland. Before he arrived at his teens, young Ruskin had composed much, both in prose and verse, and he early manifested an aptitude for drawing, as well as a decided taste for art, which, it is said, was in some measure incited by the gift, from a partner of his father, of a copy of the poet Rogers' "Italy," with engravings by Turner. Nor, early in manhood, did he escape a youth's fond dream of love, for as a worshipper of beauty, and an enthusiast of the "Wizard of the North," we find him drawn tenderly to a daughter of Lockhart, editor of the "Quarterly Review," a grandchild of his famous countryman, Sir Walter Scott. The affair, however, though encouraged by his parents, who longed to see their son settled in life, came to nought, chiefly owing to the young lover's weak physical frame and uncertain health. Later on, unhappily, he was caught in the toils of another Scottish lass, for whom, it is related, he had written "The King of the Golden River" (1841), and whose rare beauty had readily attracted him. With her, in 1848, he made an ill-assorted marriage, only to find, some years afterwards, his heart riven and a bitter ingredient dropped into his life's chalice by a fatal defection on the wife's part, she having become enamoured of the then rising young painter, Millais, whom Ruskin had trustingly invited to his house to paint her portrait. The sequel of the affair is

a pitiful one, which Ruskin ever afterward hid deep in his heart, though at the time, finding that the woman was unable to live at the intellectual and spiritual altitude of her loyal husband, the latter, with a magnanimity beyond parallel, pardoned both Millais and the erring one, consented to a divorce, and actually stood by her at the altar as the faithless one took upon herself new vows unto a new husband. The estrangement and loss of a wife gave Ruskin afresh to Art, — his true and fondly cherished bride.

At this period, as we know, English painting was at a low ebb, mediocre and conventional, though with a show of artificial brilliance. Ruskin, with his scorn of the artificial and scholastic, threw himself into the work of overturning the established, complacent school of the time, and with splendid enthusiasm and an unfailing belief in himself and his ideas he undertook to reform what had been, and to raise current conceptions of art to a more exalted and lofty plane. We have seen what he had already achieved in his first dashing period of literary activity, in the production of the early volumes of "Modern Painters," and in his "Seven Lamps" and "Stones of Venice." While he was at work on the concluding volumes of the first and last of these great books there arose in England the somewhat fantastic movement in art, launched by the Pre-Raphaelite Brotherhood, which included such Ruskinites and other

devotees of early Christian and mediæval painting as Rossetti, Millais, Morris, Burne-Jones, and Holman Hunt. Towards this new school of symbolists and affectationists Ruskin was not at first drawn, since it seemed to him unduly idealistic, if not mystic, and smacked not a little, as he thought, of popery. Later, however, he saw good in it, as a breaking away from academic trammels; while he recognized the earnest enthusiasm of the little band of artists and artist-poets, as well as their technical dexterity and brilliance. With ready decision as well as with his accustomed zeal for art, Ruskin ended by defending and applauding the new innovators, particularly as their chief motive was the one the master had always strenuously pled for,— adherence to the simplicity of nature. Their scrupulous attention to detail, characteristic of the Pre-Raphaelites, later on bore good results, even after the Brotherhood fell apart, especially in William Morris's application of their art-principles to household decoration and furnishings. But for the time the movement was loudly mocked and decried, and perhaps all the more because of Ruskin's espousal of the fervid band, his letters of defence in the London "Times," and his discussion in his booklet on "Pre-Raphaelitism." Heedless of the outcry, Ruskin pursued his own self-confident course, and by the year 1860 he had completed his "Modern Painters," and, in spite of objurgation and detraction, had

won a great name for himself as a critic and expounder, while expanding himself over almost the whole world of art.

We have said that Pre-Raphaelitism, as a movement in art, was contemporaneously jeered at; while to-day, among superficial or inappreciative students of the period, seriously to mention it or any of its cultured brotherhood is to provoke a smile. Nevertheless, there was not a little high merit in the movement, which Ruskin was keen-eyed and friendly enough to recognize, while much that is worthy afterwards came out of it in the later work of the more notable of its members as well as in that of their unenrolled associates and the admirers of the Pre-Raphaelite method. What the movement owed to Ruskin is now frankly conceded, in the lesson the brotherhood took to heart from his counsellings, — to divest art of conventionality, and to work with scrupulous fidelity and sincerity of purpose. Nor was contemporary art alone the gainer by the movement; it also had its influence on poetry, though this has been obscured — so far as any beneficial influence can be traced at all — by the tendency manifested in some of the more amorous poetic swains of the period, who professed to derive their inspiration from the Brotherhood, to identify themselves with what has been styled the "Fleshly School" of verse. Of the latter number, Swinburne in his early "Poems and Ballads,"

was perhaps the greatest sinner, though atoned for in part by the lyrical art and ardor of his verse, and much more by the higher qualities and scholarly characteristics of his later dramatic work. Nor is Dante Rossetti himself, in some of his poems, free from the same taint, despite the fact of his interesting individuality as the chief inspirer and laborer among the Brotherhood. Yet the movement owed much to both his brush and his pen of other and nobler, because reverential, work, as those will admit who know "The Blessed Damozel," "Sister Helen," and his fine collection of sonnets, "The House of Life," as well as his famous paintings, "The Girlhood of Mary Virgin," and his Annunciation picture, "Ecce Ancilla Domini." Of the product of other Pre-Raphaelites of note, — such as Ford Madox Brown, Millais, Morris, Woolner the sculptor, Coventry Patmore, and Holman Hunt, — much that is commendable as well as finely imaginative came from their hands, and justified Ruskin in his gallant advocacy of the movement, its founders, and their work.

By this time, of which we have been writing, Ruskin had reached the early meridian of his powers, and, as we have hinted, had wrested from the unwilling many a juster recognition of his amazing industry and genius. To his fond and indulgent parents this was a great source of pride and satisfaction, and the practical evidence of it was the throng of visitors to the family

seats of Herne Hill and Denmark Hill, in the then London suburbs, where Ruskin long had his home, and by the attentions and honor paid to their son by universities, academies, and public bodies, as well as by many eminent personages and the intellectual *élite* of the nation. Among those with whom the young celebrity was then intimate and reckoned among his admiring correspondents were, besides Turner (who died in 1851) and the chief artists of the time, the Carlyles and the Brownings, Mary Russell Mitford, Charlotte Brontë, Harriet Beecher Stowe, Monckton Milnes (Lord Houghton), Charles Eliot Norton, Lady Trevelyan (Macaulay's sister), Whewell, Maurice, Kingsley, Dr. John Brown (author of "Rab and his Friends"), Tennyson, and Dean Milman. To these might be added many notable foreigners whom he either met with in his continental travels or who were attracted to him by a lively interest in his writings. In his home, thanks to a wealthy and indulgent father, he was surrounded with every comfort, short of luxury, if we except under the latter the large sums expended on the purchase of "Turners" and many famous foreign pictures, and a vast and increasing collection of favorite books and other treasures and curios.

Of the author's home-life we get many delightful reminiscences in "Præterita," with entertaining talks of his childhood days, his youthful companions, his

toys and animate pets, his early playful adventures in authorship, and other garrulities with which, late in life when the work, as it remains, was incompletely put together, he beguiled the weariness and feebleness of old age. But we are anticipating, for we are writing of Ruskin when his hand was yet on the plough, and the plough was still in the furrow, and half a long life's arduous work was yet before him. At this era, no brain could well have been more active or fuller of philanthropies than his, for we approach the second period of his life's grand activities, — the era of a new departure in the interests that occupied him and the herculean tasks he set himself to do.

Before recording some of the achievements of this time and glancing at the inciting causes of the transition which marks the era we have now reached, let us note the demands made upon Mr. Ruskin's thought and labor by universities and public institutions, whose audiences desired to have him appear before them in person and address them upon topics in which he and they were interested. These appearances on the lecture platform were now numerous, since many throughout the kingdom were eager to see and know the man whose art criticisms, principles that govern the beautiful, and stimulating thought on all subjects, had made so deep an impression on the reflecting minds of the age. His earliest appearance on the rostrum was at

Edinburgh, where he delivered four lectures before the Philosophical Institution, chiefly on landscape-painters and on Christian art, with a plea for the use of Gothic in domestic architecture. Subsequent appearances were at Manchester, where he spoke on the Political Economy of Art and the relation of art to manufactures; at the South Kensington Museum, London, which had just been opened; and later at Oxford, where further on in his career he became Slade Professor of Art in his own University. From the accounts of these public lectures we get opinions as to the personal appearance of Ruskin at the period which add to our knowledge of him from paintings, drawings, and photographs, though not a few of these accounts vary from those given us in books, chiefly sketched by his lady friends and correspondents. The more trusty of the contemporary pictures speak of him as having "light, sand-colored hair; his face more red than pale; the mouth well cut, with a good deal of decision in its curve, though somewhat wanting in sustained dignity and strength; an aquiline nose; his forehead by no means broad or massive, but the brows full and well bound together; the eye [says the observer from whom we are quoting] we could not see, in consequence of the shadows that fell upon his [Ruskin's] countenance from the lights overhead, but we are sure that the poetry and passion we looked for almost in vain in other features must be concentrated

here." Miss Mitford speaks of him at this time as "eloquent and distinguished-looking, fair and slender, with a gentle playfulness, and a sort of pretty waywardness that was quite charming." Another, a visitor at his London home, characterizes him as "emotional and nervous, with a soft, genial eye, a mouth thin and severe, and a voice that, though rich and sweet, yet had a tendency to sink into a plaintive and hopeless tone." Later on in years we have this verbal portrait from a disciple of the great art-teacher, occurring in an inaugural address delivered before the Ruskin Society of Glasgow: "That spare, stooping figure, the rough-hewn, kindly face, with its mobile, sensitive mouth, and clear deep eyes, so sweet and honest in repose, so keen and earnest and eloquent in debate!"

When the fifth and last volume of "Modern Painters" was finally off his hands, Mr. Ruskin not only engaged, as we have seen, in occasional lecturing, but began (1861) to add a prolific series of *brochures* — many of them with quaint but significant titles — to his already stupendous mass of writing. Their subjects were not alone æsthetics, but now treated of ethical, social, and political questions, the prophetic declarations and earnest appeals of a man of wide and varied culture, deep thought, and large experience. The attempted alliance of political economy with art was a novel undertaking in that sixth lustrum of the past cen-

tury, even by a man of Mr. Ruskin's eminence and fame in the world of letters. But Mr. Ruskin was a bold and earnest man, as well as a genius; and he had too much to tell his heedless, *laissez-faire* age to keep silent on themes, remote as they were from those he had hitherto taught, and of which he desired to deliver his soul, whatever ridicule it might provoke and however adverse the criticism levelled against him. His humanity and moral sense were outraged by the manner in which the mass of his countrymen lived, and trenchant was his castigation of this and eager as well as righteous his desire to amend their condition and elevate and inspire their minds. As an economist, it is true, there was not a little that was false as well as eccentric in what he preached; moreover, much of his counsel was directly socialistic in its trend, repugnant in large degree to his English readers and hearers; but all this was atoned for by the honesty and philanthropy of his motives, by his phenomenal fervor and eloquence, and by the literary beauty and charm of every page he wrote. Nevertheless, as in Carlyle — for in these depreciations the style of the seer of Chelsea was deeply upon him — the note of calamity and the wail of despair are too much in evidence in Ruskin's writings at this period, while, like Carlyle also, he was equally precipitate and impulsive in his attacks on things as they were. Yet in the economic condition

just then of England, and in the circumstances environing the labor world, there was, possibly, justification for the rebukes and objurgations of onlookers of the type of both of these men, and very humanitarian as well as practically helpful were Ruskin's counsel and aid to labor and to all who sought to raise and expand their outlook and better their condition in life. Towards politics Ruskin was never drawn, but had he been more prosaic and less given to anathematizing, most valuable would have been his aid in legislation at this era of political and moral reform. But if political science, or science in any other of its branches or departments, did not come within his purview, great was the revolution he wrought in the working-man's surroundings, and immense the illumination he shed upon industry and on the spirit in which the laborer should think and work.

Referring to Ruskin at this period of his career, and to his influence as a social and moral exhorter, Frederic Harrison, from whom we have already quoted, has an admirable passage on "Ruskin as Prophet,"[1] which, as it is presumably too little known, we take pleasure in embodying in these pages.

"The influence of Ruskin," says Mr. Harrison, "has been part of the great romantic, historical, catholic, and

[1] "Tennyson, Ruskin, Mill, and other Literary Estimates," by Frederic Harrison; London and New York: Macmillan & Co. 1900.

poetic revival of which Scott, Carlyle, Coleridge, Freeman, Newman, and Tennyson in our own country have been leading spirits within the last two generations in England. There is no need to compare him with any one of these as a source of original intellectual force. He owns Scott and Carlyle as his masters, and he might vehemently repudiate certain of the others altogether. His work has been to put this romantic, historical, and genuine sympathy inspired by Scott, Wordsworth, and Carlyle into a new understanding of the arts of form. The philosophic impulse assuredly was not his own. It is a compound of Scott, Carlyle, Dante, and the Bible. The compound is strange, for it makes him talk sometimes like a Puritan father, and sometimes like a Cistercian monk. At times he talks as Flora MacIvor talked to young Waverley; at other times like Thomas Carlyle inditing a Latter-day Pamphlet. But to transfuse into this modern generation of Englishmen this romantic, catholic, historical, and social sympathy as applied to the arts of form, needed gifts that neither Scott, nor Carlyle, nor Newman, nor Tennyson possessed — the eye, if not the hand, of a consummate landscape painter, a torrent of ready eloquence on every imaginable topic, a fierce and desperate courage that feared neither man nor devil, neither failure nor ridicule, and above all things an exquisite tenderness that is akin to St. Francis or St. Vincent de Paul.

"Here is a man who, laboring for fifty years, has scattered broadcast a thousand fine ideas to all who practise the arts, and all who care for art. He has roused in the cultured world an interest in things of art such as a legion of painters and ten royal academies could never have done.

He has poured out a torrent of words, some right, some wrong, but such as have raised the level of art into a new world, which have adorned English literature for centuries, and have inspired the English race for generations; he has cast his bread upon the waste and muddy waters with a lavish hand, and has not waited to find it again, though it has been the seed of abundant harvest to others."

Again, speaking of what Ruskin sought to accomplish in the regeneration of modern society, and the reformation of our social ideals, and of that "heroic piece of Quixotism" he founded, "the Guild of St. George," Mr. Harrison remarks: —

"The first life of John Ruskin was the life of a consummate teacher of art and master of style; the second life was the life of priest and evangelist. . . . Here is the greatest living master [the passage was written while Mr. Ruskin was yet alive] of the English tongue, one of the most splendid lights of our noble literature, one to whom a dozen paths of ambition and power lay open, who had everything that could be offered by genius, fame, wealth, social popularity, and intense sensitiveness to all lovely things — and this man, after thirty years of untiring labor, devotes himself to train, teach, delight, and inspire a band of young men, girls, workmen, children, — all who choose to come around him. He lavishes the whole of his fortune on them, he brings to their door his treasures of art, science, literature, and poetry; he founds and endows museums; he offers these costly and precious collections to the people; he wears out his life in teaching them the elements of art, the

elements of manufacture, the elements of science; he shows workmen how to work, girls how to draw, to sing, to play; he gives up to them his wealth, his genius, his peace, his whole life. He is not content with writing books in his study, with enjoying art at home or abroad; he must carry his message into the streets. He gives himself up — not to write beautiful thoughts: he seeks to build up a beautiful world. . . . When I see this author of 'Modern Painters' and the 'Stones of Venice,' the man who has exhausted almost all that Europe contains of the beautiful, who has thought and spoken of almost every phase of human life, and has entered so deeply into the highest mysteries of the greatest poets — when I see him surrounding himself in his old age with lads and lasses, schoolgirls and workmen, teaching them the elements of science and art, reading to them poems and tales, arranging for them games and holidays, ornaments and dresses, lavishing on these young people his genius and his wealth, his fame and his future — I confess my memory goes back instinctively to a fresco I saw in Italy years ago — was it Luini's? — wherein the Master sat in a crowd of children and forbade them to be removed, saying that 'of such is the kingdom of heaven.'"

With this generous tribute to and appreciation of Ruskin, despite the economic vagaries into which the great critic and teacher of his time fell, we may more confidently approach the busy era of his later and self-sacrificing labors, and with less apology take space to deal — as compactly and intelligently as we can — with some of the more notable of the many books and *bro-*

chures of the period. Difficult as would be the task, fortunately there is little need to epitomize these works, as many of them are better known, and perhaps more attentively read, than his earlier, bulkier, and more ambitious writings. A few of them lie outside the economic gospel of their apostolic author, and these we will first and briefly deal with. A number of them are instructive and inspiring lay sermons on the mystical union between nature and art, beauty and utility, and their reflex in the reverential homage for the beautiful and the worthy in the mind and character of the English-speaking race. The whole form a great body of fine and thoughtful work, which is as enchaining as its meaning is often profound. The best-known of these lay sermons is: "The Queen of the Air" (1869), a splendid blending of his fancy with the Greek nature-myths of cloud and storm, represented by Athena, goddess of the heavens, of the earth, and of the heart. The parable drawn is that "the air is given us for our life, the rain for our thirst and baptism, the fire for our warmth, the sun for our light, and the earth for our meat and rest." Related to the work is "Ethics of the Dust" (1865), lectures to little housewives on mineralogy and crystallography, nature's work in crystallization being the text for a diatribe against sordid living. "Sesame and Lilies," which belongs also to this period of the writer's work, consists of three ad-

dresses, delivered at Manchester and at Dublin, designed specially for young girls, and treating in the main of good and improving literature. The first of them, "Of Kings' Treasuries," deals with the treasures hidden in books, the writings of the world's great men; its sequel, "Of Queens' Gardens," deals with the function and sphere of woman, and, by way of application with the how and the what to read; the third lecture, on "The Mystery of Life and its Arts," is a discursive but inspiring consideration of what life is and how most successfully to battle with it in the way of our work and of our appointed duty. All three lectures, observes a commentator, "tell men and women of the ideals they should set before them; how to read and to build character under the inspiration of the nobility of the past, fitting one's self for such great society; how to develop noble womanhood; how to bear one's self toward the wonder of life, toward one's work in the world, and toward one's duty to others."

Other lectures and *brochures* of or about this period are "Hortus Inclusus" (The Enclosed Garden), being "Messages from the Wood to the Garden sent in happy days to two sister ladies," residing at Coniston, and collected in 1887; "Arrows of the Chace," letters on various subjects to newspapers, gathered and edited in 1880; "The Two Paths," lectures on art and its application to Decoration and Manufacture (1859); "Ari-

adne Florentina" (1873), a monograph on Italian wood and metal engraving; "Aratra Pentelici" (1872), on the elements and principles of sculpture; and "The Eagle's Nest" (1872), on the relation of natural science to art. Still pursuing his delightful methods of interpreting nature and teaching the world instructive lessons, even from the common things of mother earth, we have a series of three eloquent discourses, entitled (1) "Proserpina," studies of Alpine and other wayside flowers, dwelling on the mystery of growth in plants and the tender beauty of their form; (2) "Deucalion," a sort of glorified geological text-book, treating of stones and their life-history, and showing the wearing effect upon them of waves and the action of water; and (3) "Love's Meinie" (1873), a rapture about birds and their feathered plumage, delivered at Eton and at Oxford. This trilogy, dealing with botany, geology, and ornithology, was presented to his audiences with illustrative drawings, representing the flora met with in his travels or found in the neighborhood of his new home in the Lancashire lakes, with sketches of regions, including the characteristics of the soil, in which he had been reared, and talks of the note and habit of all birds that were wont to warble over him their morning song. "The Pleasures of England," the "Harbours of England," and the "Art of England" further treat of his loved native land, the first of these being talks on the

pleasures of learning, of faith, and of deed, illustrated by examples drawn from early English history, and the last treating of representative modern English artists, chiefly of the Pre-Raphaelite school. "The Laws of Fésole" (1878) deals with the principles of Florentine draughtsmanship; "St. Mark's Rest," with the art and architecture of Venice; and "Val d'Arno," with early Tuscan art, interspersed with the author's accustomed ethical reflections. "Mornings in Florence," intended for the use of visitors to the art galleries of the beautiful city on the Arno, deals in the true artist-spirit with its famous examples of Christian art, giving prominence here also to the ethical side of the city's history. "In Montibus Sanctis," and "Cœli Enarrant," the one comprising studies of mountain form, and the other of cloud form and their visible causes, though separately published, are only reprints of the author's larger and nobler embodiment of his views on art, in "Modern Painters." "The King of the Golden River," of which we have previously spoken, is a fairy tale of much beauty, which he wrote for the "Fair Maid of Perth" whom he married, and who separated herself from him on the plea of "incompatibility." Playful as is the style of the story, it is not without a moral, on what constitutes true wealth and happiness. "The Crown of Wild Olive" (1866) consists of lectures on work, traffic, and war; the latter lecture, delivered at the Royal Artillery

Institution at Woolwich, was also separately published under the title of "The Future of England." The two former, being addressed to working-men, laborers, and traders, discuss economic problems, and set forth tentatively their author's antagonized political ethics, with which, in drawing this essay to a close, we now venture to deal.

After the magnificent work done by Ruskin in art up to his fortieth year, that he should turn, for practically the remainder of his life, to the seemingly vain and profitless task of a social reformer and regenerator of modern society, has to most men been a riddle too elusive and enigmatic to solve. And yet, in his earlier career, had he not himself prepared us for just such a departure as he took in the sixties, for in art was he not equally revolutionary and iconoclastic, as well as personally self-willed, passionate, and impulsive? Moreover, had not Mother Nature endowed him with the gifts of a seer and made him chivalrous as well as intensely sympathetic, while his early training inclined him to be serious, and even ascetic? Nor were the rebuffs he met with throughout his career calculated at this stage to make him court the applause of his fellowmen or be mindful of the world's censure or approval Nor can one well quarrel with what he had now to say on many a subject, visionary and enthusiast as he always was, and given over to mediæval views and preachments,

and to abounding moral and ethical exhortation. Like Carlyle's, his voice was that of one crying in the wilderness, and yet in the industrial and social condition of Britain at the era there was need of just such appeals for regeneration and reform as Ruskin strenuously uttered, accompanied by indignant rebukes of grossness, vulgarity, and meanness, as manifested in masses of the people. If in his strivings after amelioration he was too denunciatory as well as too radical, we must remember the temper and manner of the man, and recognize how difficult it was in him, or in any iconoclast who scorned modern science as Ruskin scorned it, to reconcile the age of steam and industrial machinery, which he spurned and would have none of, with the views he held of Christianity, morals, and faith. His views on political economy, which he treated neither as an art nor a science, might be perverse and wrong-headed, and his method of adapting prophetic and apostolic principles to the practice of every-day life utterly impracticable; but the virtues he counselled the nation to manifest, and the graces he enjoined of truthfulness, justice, temperance, bravery, and obedience, were qualities needed to be cultivated in his time, with a fuller recognition of and firmer trust in God and His right of sway in the world He had created.

What Ruskin's economic views were, and what his relations to the industrial and social problems of his

time, most readers of our author know, are mainly to be found in "Fors Clavigera," a series of letters to working-men, covering the years 1871–84, and in his early essays on political economy, "Unto this Last" (1860), and "Munera Pulveris" (1863). "Unto this Last" appeared in its original form in the pages of the "Cornhill Magazine," then edited by Thackeray, and our author speaks confidently of it as embodying his maturest and worthiest thoughts on social science. The work, which will be found the key to Ruskin's economic gospel, embraces four essays, treating successively of the responsibilities and duties of those called to fill all offices of national trust and service; of the true sources of a nation's riches; of the right distribution of such riches; and of what is meant by the economic terms, — value, wealth, price, and produce. Under these several heads, Ruskin expresses his conviction that co-operation and government are in all things the law of life, while the deadly things are competition and anarchy. Whatever errors the book[1] contains — and the author's unconscious arrogance and dogmatism made him blind to them — his views were set forth with

[1] Alluding to the quaint title under which these "Cornhill" essays afterwards appeared, — a title that hints at the gist of the work, — Mr. Ruskin's biographer tells us that the motto was taken from Christ's parable of the husbandman and the laborers: "Friend, I do thee no wrong. Didst thou not agree with me for a penny? Take that thine is, and go thy way. I will give UNTO THIS LAST even as unto thee." — Matt. xx. 14.

his accustomed vigor and eloquence, and in the honest belief that he was more than fundamentally right. It was for such helpful work as this, and what he accomplished in the kindred volume, "Munera Pulveris," which first appeared in "Fraser's Magazine," that Ruskin for the time dropped his revelations in art to let a new world of thought into the "dismal science" of political economy, confound its old-time instructors, and gird at the evils of the age, — the greed, selfishness, and petty bargaining spirit of industrial and commercial life. Nor in conducting such a crusade as this was Ruskin abandoning his old and less controverted gospel of art. He was but carrying into new and barren fields the high ideals he had hitherto counselled his age to emulate and heed, and in his sympathy with labor seeking to bring into its world the comeliness of beauty and the cheer of prosperity, comfort, and happiness. In "Time and Tide" (1867), and more at length in "Fors Clavigera," Ruskin reiterates his message to labor, to get rid of ever-environing misery by realizing what are the true sources of happiness, — pleasure in sincere and honest work, inspired by intelligence, culture, religion, and right living. What he desires for the working-man he desires also for his family, and consequently he urges parents to train their sons and daughters to see and love the beautiful, to cultivate their higher instincts, and call forth and feed their souls. In all this

there is much helpful, tonic thought, which the church or the nation, roused to zeal and earnest activity, might fittingly teach, and so advance the material weal of the people, extend the area of public enlightenment and morality, and herald the dawn of a new and higher civilization.

Other aspects of Mr. Ruskin's economic gospel are, unfortunately, not so sane and beneficent. His altruism knows no bounds, as his philanthropy and zeal have but few restraints. After the fashion of his mentor, Carlyle, he is carried away by his humanitarianism and his unreserved acceptance of the doctrine of the equality and brotherhood of man. Hence come his economic heresies in regard to rent and interest, and capital and usury, his denunciations of the division of labor, his Tolstoian impoverishment of himself for the benefit of his fellow-man, and his dictum that the wealth of the nation should be its own, and not accrue to the individual. Hence, also, the wholly ideal state of society he attempted to realize in his communal Guild of St. George, with its rigid government and restraints upon the personal liberty of its members. Ideally beautiful, admittedly, was the plan and scheme of the little state, with its disciplinings, exactions, and devout selective creed. But the age is a practical, unimaginative one, and whatever compacts men make, even for their highest welfare, there are, it is to be

feared, few so loyal, tractable, and docile as to place themselves for long under such tutoring and one-patterned, fashioning forms of co-operative living. Into whatever millennial state Ruskin sought to usher his little band of English followers and disciples, one must speak appreciatively of his motives in projecting the scheme, and of the money and labor he personally lavished upon the Utopian project. Reverently also must one speak of the catholic creed to which its members were asked to subscribe: namely, to trust in God, recognize the nobleness of human nature, labor faithfully with one's might, be loyal to one's common country, its laws, and its monarch's or ruler's orders, so far as they are consistent with the higher law of God; while exacting obedience, and a pledge that one will not deceive, either for gain or other motive; will not rob; will not hurt any living creature nor destroy any beautiful thing; and will honor one's own body by proper care for it, for the joy and peace of life. All this is very exemplary and beautiful, and not over-hard to live up to, though the working-men of Sheffield in time wearied of the organization, and the Guild and its noble ideals is now, we believe, but a memory, if we except the art museum and library of the Order taken over and still maintained by the town.

More practical, may we not say, than this imitation of the Florentine *arti* of the Middle Ages was the

Working Men's College, founded in London in the fifties by that other earnest Christian Socialist, F. D. Maurice, in which Ruskin lectured gratuitously, took charge of the drawing classes, and hied off to the country with its members to sketch from nature and otherwise instruct and entertain them. Yet good in many respects came of the Guild of St. George, in the impulse it gave to the revival of the then dormant industries, such as the hand-spinning of linen, hand-weaving of carpets and woollen fabrics, lace-making, wood-carving, and metal-working, besides the stimulus it gave, with the infusion of higher ideals of workmanship, to the decorative arts, and the improvement in the sightliness of factories, and in the homes and surroundings of labor. Here Ruskin's philanthropy and reform zeal showed themselves most worthily in the financial aid he gave in the pulling down, in crowded districts of the British metropolis, of poor tenements, and the building up in their place of clean, attractive, and wholesome habitations. In such benevolences and well-doings, and in this life of renunciation and self-sacrifice, Ruskin spent himself, and made serious inroads into his bodily health and strength, as well as scattered the fortune — about a million dollars — left him by his now deceased father. But this was the manner and character of Ruskin, and this the mode of expressing his love for his fellow-man, which in myriad

ways showed itself throughout a long and strenuous career of devotion to high ideals, and of practical, tender help in all good works. In all his philanthropies he was true to his own preachings and counsellings, spending and being spent in the spirit of his Divine Master, his whole soul aglow with reverence and adoration and tender with a profound moral emotion. Besides his rare endowments as a lover of the beautiful, he had that other precious gift, of golden speech, which threw a mantle of loveliness over every book he wrote and perpetual lustre over the domain of letters.

Ruskin's declining years, while hallowed by suffering, were cheered by many tender attentions and unexpected kindnesses, and by the recognition, by many notable public bodies and eminent contemporaries, of his long life of great service and devotion to his kind. In our modern age, from which, in his loved Coniston home, he passed from life Jan. 20, 1900, no one more reverently than he has looked deeper into the mystery of life, thought more concernedly of its problems, shed more passionately and eloquently about him love for the beautiful, or practically and helpfully done more — layman only though he was — for religion and humanity. At his death the nation paid honor to his memory by offering his remains a resting-place in the great fane of England's illustrious dead, Westminster Abbey; but Ruskin had himself otherwise ordered the disposal of his

body. "Bury me," he said, "at Coniston." And there, on the fifth day after his falling softly asleep, amid a concourse of loving friends, the earthly tenement of the great art critic and lover of righteousness was laid to rest, his grave strewn with myriad wreaths, garlands, and crosses of beautiful, bright flowers.

Here, after his long, strenuous, militant career, do we leave this inspiring teacher and "consecrated priest of the Ideal," his gentle soul finding rest and peace after the myriad troubles and tumults of life. Still now is the once active, fertile, stimulating mind of the man who so effectively roused his generation from its complacent smugness and indifference in its appreciation of the beautiful, and with ardent boldness challenged established beliefs in art and defied the conventionality and authority of his time. His has been a powerful force in innumerable departments of human thought, and epoch-making the influence he has exerted in giving to the world new ideals of the beautiful and in shaping modern opinion and taste in art. How great is the work he has done, and what a library of stimulating, inspiring books he has left us, comparatively few realize, as they little realize what the age owes to him for his noble activities in well-doing and his many and impressive lessons and influence. In a commonplace, commercial time, how stimulating as well as ardent have been his appeals for sensitiveness of perception in re-

gard to art, and of the tone and spirit in which it ought to be viewed and valued! And with what tender, reverent feeling has he not opened our hearts to compassion and to consideration for the welfare of our fellow-man, and how potent have been his counsellings pointing to the true and abiding sources of pleasure in life! Long must his formative opinions and influence extend, and in the minds of all who think and reflect abiding must be the charm as well as the power of his imaginative, glowing thought. That he met with opposition and hostility in his day was but the price to be paid for the disturbing, correcting, disciplining, yet inspiring part he played in the work he so impulsively set himself to do. One smiles now at the epithets of scorn and contumely once hurled at him, at the man who, little understood as he has been, has done so much to uplift and purify the thought of his time and do battle with the forces opposed to reform and arrayed against those of light and truth. And how great were the weapons with which he was armed, and how varied as well as marvellous the talents he brought into play in the onslaught upon shallowness, convention, and ignorance! Truly, he has done much for his time, and great has been the gain Modern Art has won from his inspiring lessons and thought. The coming of such a man, and at the time that was his, one cannot help reflecting, was one of the providences of an overruling Power,

and adequately to estimate his influence and work, and the tone and temper in which he wrought, we have but to consider what the age would have been, in countless departments of thought and activity, had the century now passed possessed no John Ruskin.

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HERBERT SPENCER.

1820–

THE EVOLUTIONARY PHILOSOPHY.

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THE EVOLUTIONARY PHILOSOPHY.

By MAYO W. HAZELTINE.

HERBERT SPENCER occupies a unique place in the history of human thought, because he has been the first to attempt the construction of a philosophical system in harmony with the theory of Evolution and with the results of modern science. To his contemporaries he is known almost exclusively as the author of the colossal work which he has chosen to call the "Synthetic Philosophy." Concerning his personality very little information has been published, and it is doubtful whether he will deem it worth while to leave behind him the materials for a detailed biography. About his private life we know even less than we know about that of Kant. The very few facts obtainable may be summed up in a score of sentences.

I.

HERBERT SPENCER was born on April 27, 1820, at Derby, in England, and was an only surviving child. His father was a schoolmaster in the town named, and

secretary of a philosophical society. From him the son seems to have imbibed the love of natural science and the faculty of observation conspicuous in his work. The father was particularly interested in entomology, and Spencer himself used to collect, describe, and draw insects when a boy. At the age of thirteen he was sent to study with an uncle, Rev. Thomas Spencer, a liberal clergyman and a scholar, with whom he remained three years, carrying on the study of natural history, which he had begun in childhood. He now devoted himself to mathematics, evincing a singular capacity for working out original problems. At this time, too, he became familiar with physical and chemical investigations, and already exhibited a strong tendency to experimental inquiry and original research. His aversion to linguistic studies put a university career out of the question. At the age of seventeen he entered the office of Sir Charles Fox and began work as a civil engineer, but about eight years afterward he gave up this profession, and devoted the whole of his time to scientific experiments and studies, and to contributions on philosophical questions to various periodicals. As early as 1842, in a series of letters to the Nonconformist newspaper on "The Proper Sphere of Government," he propounded a belief in human progress based on the modifiability of human nature through adaptation to its social surroundings, and he asserted the

tendency of these social arrangements to assume of themselves a condition of stable equilibrium. From 1848 to 1853 he was sub-editor of the Economist newspaper, and in his first important work, "Social Statics," published in 1850, he developed the ethical and sociological ideas which had been set forth in his published letters. The truth that all organic development is a change from a state of homogeneity to a state of heterogeneity is regarded by Spencer as the organizing principle of his subsequent beliefs. It was gradually expounded and applied by him in a series of articles contributed to the "North British," the "British Quarterly," the "Westminster," and other reviews. In these essays, and especially in the volume of "Principles of Psychology," published in 1855, the doctrine of Evolution began to take definite form, and to be applied to various departments of inquiry. It was not until four years later — a fact to be carefully borne in mind by those who would estimate correctly the relation of Spencer to Darwin — that the publication of the latter's "Origin of Species" afforded a wide basis of scientific truth for what had hitherto been matter of speculation, and demonstrated the important part played by natural selection in the development of organisms. As early as March, 1860, Spencer issued a prospectus, in which he set forth the general aim and scope of a series of works which were to be issued in periodical

parts, and would, collectively, constitute a system of philosophy. In 1862 appeared the "First Principles," and in 1867 the "Principles of Biology." In 1872 the "Principles of Psychology" was published; the first part of the "Principles of Ethics" in 1879; and his "Principles of Sociology" in three volumes, begun in 1876, was completed in 1896. In the preface to the third volume of the last-named work the author explains that the fourth volume originally contemplated, which was to deal with the linguistic, intellectual, moral, and æsthetic phenomena, would have to remain unwritten by reason of the author's age and infirmities. The astounding extent of Herbert Spencer's labors becomes, indeed, the more marvellous when one considers that impaired health has for many years incapacitated him for persistent application. Owing partly to his ill health, and partly to the absorbing nature of his occupation, his life has been a retired one, and in the ordinary sense of the term, uneventful. He has never married, and, although the high opinion of his writings formed by contemporaries has led to many academic honors being pressed upon him at home and abroad, these have all been declined. It only remains to mention that in 1882 he visited the United States, where the importance of his speculations had been early recognized, and that his home is now in Brighton, England.

II.

In Mr. Spencer's latest book, "Facts and Comments," a little light is thrown on the author's habits, opinions, and predilections. Referring to the athleticism to which so much attention is paid just now in English and American universities, he points out how erroneous it is to identify muscular strength with constitutional strength. Not only is there error in assuming that increase of muscular power and increase of general vigor necessarily go together, but there is error in assuming that the reverse connection cannot hold. As a matter of fact, the abnormal powers acquired by gymnasts may be at the cost of constitutional deterioration. In a paper on "Party Government" the author maintains that what we boast of as political freedom consists in the ability to choose a despot, or a group of oligarchs, and, after long misbehavior has produced dissatisfaction, to choose another despot or group of oligarchs: having meanwhile been made subject to laws, some of which are repugnant. Abolish the existing conventional usages, with respect to party fealty, — let each member of parliament feel that he may express by his vote his adverse belief respecting a government measure, without endangering the government's stability, — and the whole vicious system of party government would disappear. In a paper on "Patriotism," Mr. Spencer says that to him

the cry "Our country, right or wrong," seems detestable. The love of country, he adds, is not fostered in him by remembering that when, after England's Prime Minister had declared that Englishmen were bound in honor to the Khedive to reconquer the Soudan, they, after the reconquest, forthwith began to administer it in the name of the Queen and the Khedive, thereby practically annexing it; and when, after promising through the mouths of two colonial Ministers not to interfere in the internal affairs of the Transvaal, the British Government proceeded to insist on certain electoral arrangements, and made resistance the excuse for a desolating war. As to the transparent pretence that the Boers commenced the war, Mr. Spencer reminds us that in the far West of the United States, where every man carries his life in his hands and the usages of fighting are well understood, it is held that he is the real aggressor who first moves his hand toward his weapon. The application to the South African contest is obvious. In an essay on "Style," Mr. Spencer tells us that his own diction has been, from the beginning, unpremeditated. It has never occurred to him to take any author as a model. Neither has he at any time examined the writing of this or that author with a view of observing its peculiarities. The thought of style, considered as an end in itself, has rarely, if ever, been present with him, his sole purpose being to express ideas as clearly

as possible, and, when the occasion called for it, with as much force as might be. He has observed, however, he says, that some difference has been made in his style by the practice of dictation. Up to 1860 his books and review articles were written with his own hand. Since then they have all been dictated. He thinks that there is foundation for the prevailing belief that dictation is apt to cause diffuseness. The remark was once made to him, it seems, by two good judges — George Henry Lewes and George Eliot — that the style of "Social Statics" is better than the style of his later volumes; Mr. Spencer would ascribe the contrast to the deteriorating effect of dictation. A recent experience has strengthened him in this conclusion. When lately revising "First Principles," which originally was dictated, the cutting out of superfluous words, clauses, sentences, and sometimes paragraphs, had the effect of abridging the work by about one-tenth. Touching the style of other writers, Mr. Spencer points out the defects in some passages quoted from Matthew Arnold and Froude. He says that he is repelled by the ponderous, involved structure of Milton's prose, and he dissents from the applause of Ruskin's style on the ground that it is too self-conscious, and implies too much thought of effect. On the other hand, he has always been attracted by the finished naturalness of Thackeray.

A word should here be said about the misconception

of Mr. Spencer's position with reference to the fundamental postulate of religions, — a misconception which used to be more current than it is now. He cannot fairly be described as a materialist. He is no more a materialist than he is a theist. He is, in the strictest sense of the word, an agnostic. He was the most conspicuous example of the *thing* before Huxley invented the *word*. The misconception was shared by no less a man than the late Benjamin Jowett, the well-known master of Balliol College, Oxford, who, in one of his published "Letters," says: "I sometimes think that we platonists and idealists are not half so industrious as those repulsive people who only 'believe what they can hold in their hand,' Bain, H. Spencer, etc., who are the very Tuppers of philosophy." It is hard to see how the law of evolution and other generalizations of an abstract kind with which Mr. Spencer's name is associated can be held in anybody's hands. Letting that pass, however, Mr. Spencer has himself suggested that, since the system of synthetic philosophy begins with a division entitled the "Unknowable," having for its purpose to show that all material phenomena are manifestations of a Power which transcends our knowledge, — that "force as we know it can be regarded only as a Conditioned effect of the Unconditioned Cause" — there has been thereby afforded sufficiently decided proof of belief in something which cannot be held in

the hands. It is, indeed, absurd to apply the epithet "materialist" to a man who has written in "The Principles of Psychology": "Hence, though of the two it seems easier to translate so-called matter into so-called spirit than to translate so-called spirit into so-called matter (which latter is, indeed, wholly impossible), yet no translation can carry us beyond our symbols."

III.

ANY exposition of the "Synthetic Philosophy" must, of course, begin with the volume entitled "First Principles." In the first part of this preliminary work the author carries a step further the doctrine of the Unknowable put into shape by Hamilton and Mansel. He points out the various directions in which science leads to the same conclusion, and shows that in their united belief in an Absolute that transcends not only human knowledge but human conception lies the only possible reconciliation of science and religion. In the second part of the same book Mr. Spencer undertakes to formulate the laws of the Knowable. That is to say, he essays to state the ultimate principles discernible throughout all manifestations of the Absolute, — those highest generalizations now being disclosed by science, such, for example, as "the Conservation of Force," which are severally true, not of one class of phenomena,

but of *all* classes of phenomena, and which are thus the keys to all classes of phenomena.

The conclusions reached in "First Principles" may be thus summed up: over and over again in the five hundred pages devoted to their formulation, it is shown in various ways that the deepest truths we can reach are simply statements of the widest uniformities in our experiences of the relations of Matter, Motion, and Force; and that Matter, Motion, and Force are but symbols of the Unknown reality. A Power of which the nature remains forever inconceivable, and to which no limits in Time and Space can be imagined, works in us certain effects. These effects have certain likenesses of kind, the most general of which we class together under the names of Matter, Motion, and Force; and between these effects there are likenesses of connection, the most constant of which we class as laws of the highest certainty. Analysis reduces these several kinds of effects to one kind of effect; and these several kinds of uniformity to one kind of uniformity. The highest achievement of Science is the interpretation of all orders of phenomena as differently conditioned manifestations of this one kind of effect, under differently conditioned modes of this one kind of uniformity. When science has done this, however, it has done nothing more than systematize our experiences, and has in no degree extended the limits of our experiences.

We can say no more than before whether the uniformities are as absolutely necessary as they have become to our thought relatively necessary. The utmost possibility for us is an interpretation of the process of things, as it presents itself to our limited consciousness; but how this process is related to the actual process we are unable to conceive, much less to know.

Similarly we are admonished to remember that, while the connection between the phenomenal order and the ontological order is forever inscrutable, so is the connection between the conditioned forms of being and the unconditioned form of being forever inscrutable. The interpretation of all phenomena in terms of Matter, Motion, and Force is nothing more than the reduction of our complex symbols of thought to the simplest symbols; and when the equation has been brought to its lowest terms, the symbols remain symbols still. Hence the reasonings contained in "First Principles" afford no support to either of the antagonist hypotheses respecting the ultimate nature of things. Their implications are no more materialistic than they are spiritualistic, and no more spiritualistic than they are materialistic. The establishment of correlation and equivalence between the forces of the outer and the inner worlds serves to assimilate either to the other, according as we set out with one or the other. He who rightly interprets the doctrine propounded in "First

Principles" will see that neither the forces of the outer, nor the forces of the inner, world can be taken as ultimate. He will see that, though the relation of subject and object renders necessary to us the antithetical conceptions of Spirit and Matter, the one is no less than the other to be regarded as but a sign of the Unknown Reality which underlies both.

In logical order the formulation of "First Principles" should have been followed by the application of them to Inorganic Nature. This great division of Mr. Spencer's subject is passed over, however; partly because, even without it, the scheme is too extensive to be carried out in the lifetime of one man; and partly because the interpretation of Organic Nature, after the proposed method, is of more immediate importance. Before noting how Mr. Spencer applies his fundamental principles to the interpretation of the phenomena of life, it may be well to put before the reader's eye the "formula of evolution" in the author's own language: "Evolution is an integration of matter and concomitant dissipation of motion; during which the matter passes from an indefinite, incoherent homogeneity to a definite, coherent heterogeneity; and during which the retained motion undergoes a parallel transformation." This law of evolution is equally applicable to all orders of phenomena, — "astronomic, geologic, biologic, psychologic, sociologic, etc.," — since these are all component parts

of one cosmos, though disguised from one another by conventional groupings. It is obvious that, so long as evolution is merely established by induction, it belongs, not to philosophy, but to science. To belong to philosophy it must be deduced from the persistence of force. Mr. Spencer holds that this can be done. For any finite aggregate, being unequally exposed to surrounding forces, will become more diverse in structure, every differentiated part will become the parent of further differences; at the same time, dissimilar units in the aggregate tend to separate, and those which are similar, to cluster together ("segregation"); and this subdivision and dissipation of forces, so long as there are any forces unbalanced by opposite forces, must end at last in rest; the penultimate stage of this process "in which the extremest multiformity and most complex moving equilibrium are established," being the highest conceivable state. The various derivative laws of phenomenal changes are thus deducible from the persistence of force. It remains to apply them to inorganic, organic, and superorganic existences. The detailed treatment of inorganic evolution is omitted, as we have said, from Spencer's plan, and he proceeds to interpret "the phenomena of life, mind, and society in terms of Matter, Motion, and Force."

IV.

THE first volume of the "Principles of Biology" consists of three parts, the first of which sets forth the data of biology, including those general truths of physics and chemistry with which rational biology must start. The second part is allotted to the inductions of biology, or, in other words, to a statement of the leading generalizations which naturalists, physiologists, and comparative anatomists have established. The third and final part of the first volume of the "Principles of Biology" deals with the speculation commonly known as "the development hypothesis," and considers its *a priori* and *a posteriori* evidences.

The inductive evidences for the evolutionary hypothesis, as contra-distinguished from the special-creation hypothesis, are dealt with in four chapters. The "Arguments from Classification" are these: Organisms fall into groups within groups; and this is the arrangement which we see results from evolution where it is known to take place. Of these groups within groups, the great or primary ones are the most unlike, the sub-groups are less unlike, the sub-sub-group still less unlike, and so on; and this, too, is a characteristic of groups demonstrably produced by evolution. Moreover, indefiniteness of equivalence among the groups is common to those which we know have been evolved, and to those

supposed in the volume before us to have been evolved. There is the further significant fact that divergent groups are allied through their lowest rather than their highest members. Of the "Arguments from Embryology," the first is that, when developing embryos are traced from their common starting-point, and their divergencies and re-divergencies are symbolized by a genealogical tree, there is manifest a general parallelism between the arrangement of its primary, secondary, and tertiary branches, and the arrangement of the divisions and subdivisions of Mr. Spencer's classifications. Nor do the minor deviations from this general parallelism, which look like difficulties, fail on closer observation to furnish additional evidence; since those traits of a common ancestry which embryology reveals are, if modifications have resulted from changed conditions, liable to be disguised in different ways and degrees, in different lines of descendants. Mr. Spencer next considers the "Arguments from Morphology." Apart from those kinships among organisms disclosed by their developmental changes, the kinships which their adult forms show are profoundly significant. The unities of type found under such different externals are inexplicable, except as results of community of descent, with non-community of modification. Again, each organism analyzed apart shows, in the likenesses obscured by unlikenesses of its component parts, a peculiarity which

can be ascribed only to the formation of a more heterogeneous organism out of a more homogeneous one. And, once more, the existence of rudimentary organs, homologous with organs that are developed in allied animals or plants, while it admits of no other rational interpretation, is satisfactorily interpreted by the hypothesis of evolution. Last of the inductive evidences are the "Arguments from Distribution." While the facts of distribution in space are unaccountable as results of designed adaptation of organisms to their habitats, they are accountable as results of the competition of species, and the spread of the more fit into the habitats of the less fit, followed by the changes which new conditions induce. Though the facts of distribution in time are so fragmentary that no positive conclusion can be drawn, yet all of them are reconcilable with the hypothesis of evolution, and some of them yield strong support,— especially the near relationship existing between the living and extinct types in each great geographical area. Thus of these four categories of evidence, each furnishes several arguments which point to the same conclusion. This coincidence would give to the induction a very high degree of probability, even were it not enforced by deduction. As a matter of fact, the conclusion deductively reached is in harmony with the inductive conclusion. Mr. Spencer has deductively shown that, by its lineage and its kindred, the

evolution-hypothesis is as closely allied with the proved truths of modern science as is the antagonist hypothesis, that of special creation, with the proved errors of ancient ignorance. He has shown that, instead of being a mere pseud-idea, it admits of elaboration into a definite conception, so showing its legitimacy as an hypothesis. Instead of positing a purely fictitious process, the process which it alleges proves to be one actually going on around us. To which may be added that the evolution-hypothesis presents no radical incongruities from a moral point of view. On the other hand, the special-creation hypothesis is shown to be not even a thinkable hypothesis, and, while thus intellectually illusive, to have moral implications irreconcilable with the professed beliefs of those who hold it.

Passing from the evidence that Evolution has taken place to the question — How has it taken place? — Mr. Spencer finds in known agencies and known processes adequate causes of its phenomena. In astronomic, geologic, and meteorologic changes, ever in progress, ever combining in new and more involved ways, we have a set of inorganic factors to which all organisms are exposed; and in the varying and complicated actions of organisms on one another we have a set of organic factors that alter with increasing rapidity. Thus, speaking generally, all members of the Earth's flora and fauna experience perpetual rearrangements of external forces.

Each organic aggregate, whether considered individually or as a continuously existing species, is modified afresh by each fresh distribution of external forces. To its pre-existing differentiations new differentiations are added; and thus that lapse to a more heterogeneous state, which would have a fixed limit were the circumstances fixed, has its limits perpetually removed by the perpetual change of the circumstances. These modifications upon modifications, which result in evolution, structurally considered, are the accompaniments of those functional alterations continually required to re-equilibrate inner with outer actions. That moving equilibrium of inner actions corresponding with outer actions, which constitutes the life of an organism, must either be overthrown by a change in the outer actions or must undergo perturbations that cannot end until there is a readjusted balance of functions and correlative adaptation of structures. But where the external changes are either such as are fatal when experienced by the individuals, or such as act on the individuals in ways that do not affect the equilibrium of their functions, then the readjustment results through the effects produced on the species as a whole: there is indirect equilibration. By the preservation in successive generations of those whose moving equilibria are less at variance with the requirements, there is produced a changed equilibrium completely in harmony with the requirements.

Even were this the whole of the evidence assignable for the belief that organisms have been gradually evolved, Mr. Spencer holds that the belief would have a warrant higher than is possessed by many beliefs which are regarded as established. As a matter of fact, however, the evidence is far from exhausted. At the outset of the first volume of "Principles of Biology," it was remarked by the author that the phenomena presented by the organic world as a whole cannot be properly dealt with apart from the phenomena presented by each organism in the course of its growth, development, and decay. The interpretation of either class of phenomena implies interpretation of the other, since the two are in reality parts of one process. Hence the validity of any hypothesis respecting the one class of phenomena may be tested by its congruity with phenomena of the other class. In the second volume of "The Principles of Biology," Mr. Spencer passes to the more special phenomena of development, as displayed in the structures and functions of individual organisms. If the hypothesis that plants and animals have been progressively evolved be true, it must furnish us with keys to these special phenomena. Mr. Spencer finds that the hypothesis does this, and by doing it gives numberless additional vouchers for its truth. It is impossible for us here to review, even in outline, the extensive field traversed in the second volume of "Principles of Biology." We

would not omit, however, to direct attention to the interesting conclusion reached by Mr. Spencer toward the close of the volume with regard to the future of the human race considered from the viewpoint of the possible pressure of population upon subsistence. He points out that in man all the equilibrations between constitution and conditions, between the structure of society and the nature of its members, between fertility and mortality, advance simultaneously towards a common climax. In approaching an equilibrium between his nature and the ever-varying circumstances of his inorganic environment, and in approaching an equilibrium between his nature and all the requirements of the social state, man is at the same time approaching that lowest limit of fertility at which the equilibrium of population is maintained by the addition of as many infants as there are subtractions by death.

V.

NEXT in logical order and in order of publication come the two volumes collectively entitled "The Principles of Psychology." In these volumes an attempt is made to trace objectively the evolution of mind from reflex action through instinct to reason, memory, feeling, and will, from the interaction of the nervous system with its environment. Subjectively, mental states are analyzed, and it is contended that all of them — including

those primary scientific ideas, the perceptions of matter, motion, space, and time, assumed in the "First Principles" — can be analyzed into a primitive element of consciousness, something which can be defined only as analogous to a nervous shock. These perceptions have now become innate in the individual. They may be called — as Kant called space and time — forms of intuition; but they have been acquired empirically by the race, through the persistence of the corresponding phenomena in the environment, and from the accumulated experiences of each individual being transmitted in the form of modified structure to his descendants. This principle of heredity is one of the laws by which individuals are connected with one another into an organic whole; and we thus pass to what Spencer calls super-organic evolution, implying the co-ordinated actions of many individuals, and giving rise to the science of sociology.

It is this science which Mr. Spencer undertakes to expound in the three volumes entitled the "Principles of Sociology." The first of these volumes presents a statement of the several sets of factors entering into social phenomena. These factors are, first, human ideas and feelings considered in their necessary order of evolution; secondly, surrounding natural conditions; and, thirdly, those ever-complicating conditions to which society itself gives origin. Under the caption "The In-

ductions of Sociology," are set forth the general facts, structural and functional, gathered from a survey of societies and their changes; in other words, the empirical generalizations that are arrived at by comparing different societies, or successive stages of the same societies. The author then examines the evolution of governments, general and local, as this is determined by natural causes; their several types and metamorphosis; their increasing complexity and specialization, and the progressive limitation of their functions. From political the author turns to ecclesiastical organization. He traces the differentiation of religious government from secular; its successive complications and the multiplication of sects; the growth and continued modification of religious ideas, as caused by advancing knowledge and changing moral character; and the gradual reconciliation of these ideas with the truths of abstract science. A good deal of space is devoted to what the author calls ceremonial organization, by which he means that third kind of government which, having a common root with the others, and slowly becoming separate from and supplementary to them, serves to regulate the minor actions of life. Finally, Mr. Spencer discusses industrial organization; that is to say, the development of productive and distributive agencies, considered in its necessary causes, comprehending not only the progressive division of labor and the increas-

ing complexity of each industrial agency, but also the successive forms of industrial government as passing through like phases with political government.

Many pages would be requisite adequately to describe the result of the inquiries prosecuted by Mr. Spencer during some twenty years, and embodied in the three volumes entitled "Principles of Sociology." The ultimate conclusions reached, however, may be summed up in a few paragraphs. It is the author's final conviction that, if the process of evolution, which, unceasing throughout past time, has brought life to its present height, continues throughout the future, as we cannot but anticipate, then, amid all the rhythmical changes in each society, amid all the lives and deaths of nations, amid all the supplantings of race by race, there will go on that adaptation of human nature to the social state which began when savages first gathered together into hordes for mutual defence, — an adaptation finally complete. Mr. Spencer foresees that many will think this a wild imagination. Though everywhere around them are creatures with structures and instincts which have been gradually so moulded as to subserve their own welfares and the welfares of their species, yet the immense majority ignore the implication that human beings, too, have been undergoing in the past, and will undergo in the future, progressive adjustments to the lives imposed on them by circum-

stances. There are a few, nevertheless, who think it rational to conclude that what has happened with all lower forms must happen with the highest forms, — a few who infer that among types of men those most fitted for making a well-working society will hereafter, as heretofore, from time to time, emerge and spread at the expense of types less fitted, until a fully fitted type has arisen.

It is, at the same time, conceded that the view thus suggested cannot be accepted without qualification. If we carry our thoughts as far forward as palæolithic implements carry them back, we are introduced, not to an absolute optimism, but to a relative optimism. The cosmic process brings about retrogression, as well as progression, where the conditions favor it. Only amid an infinity of modifications, adjusted to an infinity of changes of circumstances, do there now and then occur some which constitute an advance: other changes, meanwhile, caused in other organisms, usually not constituting forward steps in organization, and often constituting steps backward. Evolution does not imply a latent tendency to improve everywhere in operation. There is no uniform ascent from lower to higher, but only an occasional production of a form, which, in virtue of greater fitness for more complex conditions, becomes capable of a longer life of a more varied kind. And, while such higher

type begins to dominate over lower types, and to spread at their expense, the lower types survive in habitats or modes of life that are not usurped, or are thrust into inferior habitats or modes of life in which they retrogress.

Mr. Spencer's examination of "The Principles of Sociology" has led him to the belief that what holds with organic types must hold also with types of society. Social evolution throughout the future, like social evolution throughout the past, must, while producing, step after step, higher societies, leave outstanding many lower. Varieties of men adapted here to inclement regions, there to regions that are barren, and elsewhere to regions unfitted, by ruggedness of surface or insalubrity, for supporting large populations, will, in all probability, continue to form small communities of simple structures. Moreover, during future competitions among the higher races, there will probably be left, in the less desirable regions, minor nations formed of men inferior to the highest; at the same time that the highest overspread all the great areas which are desirable in climate and fertility. But while the entire assemblage of societies thus fulfils the law of evolution by increase of heterogeneity, — while within each of them contrasts of structure, caused by differences of environments and entailed occupations, cause unlikenesses implying further heterogeneity, we may infer

that the primary process of evolution — integration — which, up to the present time, has been displayed in the formation of larger and larger nations, will eventually reach a still higher stage, and bring yet greater benefits. As when small tribes were welded into great tribes, the head chief stopped inter-tribal warfare; as, when small feudal governments became subject to a king, feudal wars were prevented by him, — so, in time to come, a federation of the highest nations, exercising supreme authority (already foreshadowed by occasional agreements among "the Powers"), may, by forbidding wars between any of its constituent nations, put an end to the re-barbarization which is continually undoing civilization.

When, eventually, this peace-maintaining federation has been formed, Mr. Spencer looks for effectual progress towards that equilibrium between constitution and conditions, — between inner faculties and outer requirements, — implied by the final stage of human evolution. Adaptation to the social state, now perpetually hindered by anti-social conflict, may then go on unhindered; and all the great societies, in other respects differing, may become similar in those cardinal traits which result from complete self-ownership of the unit, and from exercise over him of nothing more than passive influence by the aggregate. On the one hand, by continual repression of aggressive instincts and by contin-

ual exercise of feelings which prompt ministration to public welfare, and, on the other hand, by the lapse of restraints gradually becoming less necessary, there will be produced, in Mr. Spencer's forecast, a kind of man so constituted that, while fulfilling his own desires, he will fulfil also the social needs. Already, small groups of men, shielded by circumstances from external antagonisms, have been moulded into forms of moral nature so superior to our own that the account of their goodness almost savors of romance; and it is reasonable to infer that what has even now happened on a small scale may, under kindred conditions, ultimately happen on a large scale. Prolonged studies, showing among other things the need for certain qualifications above indicated, but also revealing facts like that just named, have not caused our author to recede from the belief expressed nearly fifty years ago that "the ultimate man will be one whose private requirements coincide with public ones. He will be that manner of man who, in spontaneously fulfilling his own nature, incidentally performs the functions of a social unit; and yet is only enabled so to fulfil his own nature by all others doing the like."

Before taking leave of the "Principles of Sociology," we should caution the reader against a misconception that might seem, at first sight, to find some warrant in the following remark of a sympathetic reviewer: "Like

Aristotle, he [Mr. Spencer] has had to delegate large portions of his work to be done for him by others." As our author has himself pointed out in "Facts and Comments," the reviewer's reference will be rightly interpreted by those who know that the work delegated by Aristotle to others was simply the *collection* of materials for his Natural History, not the classification of those materials, much less the drawing of inductions from them. As not one reader in ten knows this, however, wrong impressions are likely to be made by the reviewer's remark. Mr. Spencer's name being especially associated with the "Synthetic Philosophy," the sentence quoted will suggest to many the thought that large portions of that work were written by deputy. This, of course, the reviewer did not mean to say. The work to which he referred is entitled "Descriptive Sociology, or groups of sociological facts, classified and arranged by Herbert Spencer, compiled and abstracted by David Duncan, Richard Scheppig and James Collier," eight parts of which have thus far appeared. Knowing that he should be unable to read all the works of travel and history containing the facts he should need when dealing with the science of society, Mr. Spencer engaged these gentlemen — first one, then two, then three — to read up for him and arrange the extracts they made in a manner prescribed. With much material he had himself accumulated in the course of many years, our author incor-

porated a much larger amount of material derived from the compilations just mentioned when writing the "Principles of Sociology."

VI.

It is the two volumes entitled the "Principles of Ethics" to which we shall lastly invite attention. The six parts of which this work is composed were published in an irregular manner. Part I., presenting the data of ethics, was issued in 1879; Part IV., a treatise on "Justice," in 1891; Parts II. and III., which set forth respectively the inductions of ethics and the ethics of individual life, and which, along with Part I., form the first volume, were issued in 1892; Parts V. and VI., which treat respectively of negative beneficence and positive beneficence, were issued in 1893, and, along with Part IV., constitute the second volume. With regard to the "Principles of Ethics," considered as a whole, it should be noted that the author was prompted to prepare the work, notwithstanding the ill health by which he was incessantly interrupted, by the conviction that the establishment of rules of conduct on a scientific basis is a pressing need. Now that moral injunctions are losing the authority given by their supposed sacred origin, the secularization of morals is becoming imperative. Those who reject the current creed appear to assume that the controlling agency conferred by it may

safely be thrown aside. On the other hand, those who defend the current creed allege that, in the absence of the guidance it yields, no guidance can exist, divine commandments being, in their opinion, the only possible guides. Dissenting from both of these beliefs, Mr. Spencer has had for his primary purpose in the two volumes under review to show that, apart from any supposed supernatural basis, the principles of ethics have a natural basis. In these two volumes this natural basis is set forth, and its corollaries are elaborated. If the conclusions to which the general law of evolution introduces us are not in all cases as definite as might be wished, yet our author submits that they are more definite than those to which we are introduced by the current creed. Complete definiteness is not, of course, to be expected. Right regulation of the actions of so complex a being as man, living under conditions so complex as those presented by a society, evidently forms a subject-matter unlikely to admit of specific statements throughout its entire range.

The principal inductions drawn from the data collected in the first of these volumes may be set forth in a few sentences. Multitudinous proofs are brought forward of the fact that the ethical sentiment prevailing in different societies, and in the same society under different conditions, are sometimes diametrically opposed. In Europe and in the United States to have committed a

murder disgraces for all time a man's memory, and disgraces for generations all who are related to him. By the Pathans, however, a contrary sentiment is displayed. One who had killed a Mellah (priest) and failed to find refuge from the avengers, said at length: "I can but be a martyr; I will go and kill a Sahib." He was hanged after shooting a sergeant, perfectly satisfied "at having expiated his offence." The prevailing ethical sentiment in England is such that a man who should allow himself to be taken possession of and made an unresisting slave would be regarded with scorn; but the people of Drekete, a slave-district of Fiji, "said it was their duty to become food and sacrifices for the chiefs," and that "they were honored by being considered adequate to such a noble task." Less extreme, though akin in nature, is the contrast between the feelings which the history of Englishmen has recorded within a few centuries. In Elizabeth's time, Sir John Hawkins initiated the slave-trade, and, in commemoration of the achievement, was allowed to put in his coat-of-arms: "a demi-moor proper, bound with a cord,"—the honorableness of his action being thus assumed by himself, and recognized by Queen and public. At the present day, on the other hand, the making slaves of men, called by Wesley "the sum of all villanies," is regarded in England with detestation; and for many years the British government maintained a fleet to suppress the slave-trade. Again,

peoples who have emerged from the primitive family-and-clan organization, hold that one who is guilty of a crime must himself bear the punishment, and it is thought extreme injustice that the punishment should fall upon any one else. The remote ancestors of the English people thought and felt differently, as do still the Australians, whose "first great principle with regard to punishment is that all the relatives of a culprit, in the event of his not being found, are implicated in his guilt; the brothers of the criminal conceive themselves to be quite as guilty as he is." Then, too, among civilized peoples the individualities of women are so far recognized that the life and liberty of a wife are not supposed to be bound up with those of her husband; and she now, having obtained a right to exclusive possession of property, contends for complete independence, domestic and political. It is, or was, otherwise in Fiji. The wives of the Fijian chiefs consider it a sacred duty to suffer strangulation on the deaths of their husbands. A woman who had been rescued by an Englishman "escaped during the night, and, swimming across the river, and presenting herself to her own people, insisted upon the completion of the sacrifice which she had in a moment of weakness reluctantly consented to forego." Another foreign observer tells of a Fijian woman who loaded her rescuer "with abuse, and ever afterwards manifested the most deadly hatred towards him." In England and

on the Continent the religious prohibition of theft and the legal punishment of it are joined with a strong social reprobation, so that the offence of a thief is never condoned. In Beloochistan, on the other hand, quite contrary ideas and feelings are current. There "a favorite couplet is to the effect that the Biloch who steals and murders, secures Heaven to seven generations of ancestors." In England and the United States reprobation of untruthfulness is strongly expressed, alike by the gentleman and the laborer. In many parts of the world it is not so. In Blantyre, for example, according to MacDonald, "to be called a liar is rather a compliment." Once more: English sentiment is such that the mere suspicion of incontinence on the part of a woman is enough to blight her life; but there are peoples whose sentiments entail no such effect, and, in some cases, a reverse effect is produced: "Unchastity is, with the Wetyaks, a virtue." It seems, then, that in respect of all the leading divisions of human conduct, different races of men, and the same races at different stages, entertain opposite beliefs, and display opposite feelings.

In Mr. Spencer's opinion, the evidence here brought to a focus ought to dissipate once for all the belief in a moral sense, as commonly entertained. A long experience of mankind, however, prevents him from indulging in such an expectation. Among men at large, lifelong convictions are not to be destroyed either by

conclusive arguments or multitudinous facts. Only to those who are not by creed or cherished theory committed to the hypothesis of a supernaturally created human species will the evidence above summed up prove that the human mind has no originally implanted conscience. Mr. Spencer himself at one time espoused the doctrine of the intuitive moralists, but it has gradually become clear to him that the qualifications required practically obliterate the doctrine as enunciated by them. It has become clear to him, in other words, that if among civilized folk the current belief is that a man who robs and does not repent will be eternally damned, while an accepted proverb among the Bilochs is, that "God will not favor a man who does not steal and rob," it is impossible to hold that men have in common an innate perception of right and wrong.

At the same time, while the inductions drawn by Mr. Spencer from the data of ethics show that the moral-sense doctrine in its original form is not true, they also show that it adumbrates a truth, and a much higher truth. For the facts cited, chapter after chapter, unite in proving that the sentiments and ideas current in each society become adjusted to the kinds of activity predominating in it. A life of constant external enmity generates a code in which aggression, conquest, revenge, are inculcated, while peaceful occupations are reprobated. Conversely, a life of settled internal amity generates a

code inculcating the virtues conducing to harmonious co-operation, — justice, honesty, veracity, regard for others' claims. The implication is that, if the life of internal amity continues unbroken from generation to generation, there must result not only the appropriate code, but the appropriate emotional nature, — a moral sense adapted to the moral requirements. Men so conditioned will acquire to the degree needful for complete guidance that innate conscience which the intuitive moralists erroneously supposed to be possessed by mankind at large. There needs but a continuance of absolute peace externally and a rigorous insistence on non-aggression internally, to insure the moulding of men into a form naturally characterized by all the virtues. This general induction is re-enforced by especial induction. Now as displaying this high trait of nature, now as displaying that, Mr. Spencer has instanced various uncivilized peoples who, inferior to us in other respects, are morally superior to us. He has also pointed out that such peoples are, one and all, free from inter-tribal antagonisms. The peoples showing this connection between external and internal peacefulness on the one hand, and superior morality on the other, are of various races. In the Indian Hills are found some who are by origin Mongolian, Kelarian, Dravidian; in the forests of Malacca, Burma, and in secluded parts of China exist such tribes of yet other bloods; in the East Indian archi-

pelago are some belonging to the Papuan stock; in Japan there are the amiable Ainos, who have no traditions of internecine strife; and in North Mexico exists yet another such people unrelated to the rest, the Pueblos. Our author holds that no more conclusive proof could be wished than that supplied by these isolated groups of men, who, widely remote in locality and differing in race, are alike in the two respects that circumstances have long exempted them from war, and that they are now organically good. May we not reasonably infer, asks Mr. Spencer, in conclusion, that the state reached by these small, uncultured tribes may be reached by the great cultured nations, when the life of internal amity shall be unqualified by the life of external enmity?

We bring to an end our review of the "Synthetic Philosophy" by pointing out that the ethical doctrine constituting the culmination of the system which is set forth in the "Principles of Ethics" is fundamentally a corrected and elaborated version of the doctrine propounded in "Social Statics" issued as long ago as 1850. The correspondence between the two works is shown not only by the coincidence of their constructive divisions, but also by the agreement of their cardinal ideas. As in the one, so in the other, Man, in common with lower creatures, is held to be capable of indefinite change by adaptation to conditions. In both he is re-

garded as undergoing transformation from a nature appropriate to his aboriginal wild life, to a nature appropriate to a settled civilized life; and in both this transformation is described as a moulding into a form fitted for harmonious co-operation. In both works, too, this moulding is said to be effected by the repression of certain primitive traits no longer needed, and the development of needful traits. As in the first work, so in this last, the great factor in the progressive modification is shown to be sympathy. It was contended in "Social Statics," as it is contended in the "Principles of Ethics," that harmonious social co-operation implies that limitation of individual freedom which results from sympathetic regard for the freedoms of others; and that the law of equal freedom is the law in conformity to which equitable individual conduct and equitable social arrangements co-exist. Mr. Spencer's theory in 1850 was, as his theory still is, that the mental products of Sympathy which constitute what is called "the moral sense," arise as fast as men are disciplined into social life; and that along with them arise intellectual perceptions of right human relations, which become clearer as the form of social life becomes better. Further, in the earlier work it was inferred, as it is inferred in the latest, that there is being effected a conciliation of individual natures with social requirements; so that there will eventually be achieved the greatest

individuation, along with the greatest mutual dependence, — an equilibrium of such kind that each, in fulfilling the wants of his own life, will aid in fulfilling the wants of all other lives. We observe, finally, that, in the first work, there were drawn essentially the same corollaries respecting the rights of individuals and their relations to the State that are drawn in the "Principles of Ethics."

A word may be said in conclusion about the difference between the relation of Mr. Spencer on the one hand and Darwin on the other to the thought of the Nineteenth Century. The fact is not to be lost sight of that the principles of the Evolutionary, or, as Mr. Spencer prefers to term it, the Synthetic, philosophy were formulated before the publication of the "Origin of Species." What the ultimately general acceptance of the theory propounded in Darwin's work did for Mr. Spencer was precisely this: it greatly strengthened the biological evidence for the evolutionary hypothesis. That hypothesis was upheld, however, by evidence drawn not merely from biology, but from many other sources. Moreover, while the Darwinian theory of natural selection, supplemented as it was by the adoption of the Lamarkian factors, — the effect of use and disuse and the assumed transmissibility of acquired character, — merely attempted to explain the mode in which the changes in organic life have taken place upon the earth,

the evolutionary hypothesis put forth by Mr. Spencer professed to be applicable to the whole sphere of the knowable. It is further to be borne in mind that Mr. Spencer has devoted a large part of his life to tracing in detail the applications of his fundamental principles to social, political, religious, and ethical phenomena. Darwin, on the other hand, strictly confined himself to the biological field, and left to disciples the task of indicating the bearing of the Darwinian theory upon sociology, theology, and morals.

CHARLES ROBERT DARWIN:

1809–1882;

HIS PLACE IN MODERN SCIENCE.

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By MAYO W. HAZELTINE.

THERE is no doubt that, by the judgment of a large majority of scientists, the place of pre-eminence in the history of science during the nineteenth century should be assigned to Charles Robert Darwin. The theory associated with his name deserves to be called epoch-making. The Darwinian hypothesis, indeed, should not be confounded with the cosmic theory of Evolution which was formulated earlier and independently by Herbert Spencer, and supported by many arguments drawn from sources outside the field of natural history. The specific merit of the Darwinian hypothesis is that it furnishes a rational and almost universally accepted explanation of the mode in which changes have taken place in the development of organic life upon the earth. With the possible cosmical applications of his theory Darwin did not concern himself, though the bearing of his hypothesis upon wider problems was at once discerned, and has been set forth by

Spencer and others. Before stating, however, the conclusions at which Darwin arrived in his "Origin of Species," the "Descent of Man," and other writings, and before indicating the extent to which these conclusions have been adopted, we should say a word about his interesting, amiable, and exemplary personality. Concerning his private life, there is no lack of information. He himself wrote an autobiographical sketch which has been amplified by his son Francis Darwin, and supplemented with numerous extracts from his correspondence.

I.

Charles Robert Darwin was born at Shrewsbury, Feb. 12, 1809. His mother was a daughter of Josiah Wedgwood, the well-known Staffordshire potter, and his father, Dr. Robert Waring Darwin, was a son of Erasmus Darwin, well known in the eighteenth century as a physician, a naturalist, and a poet. It is a curious fact that in some of his speculations Erasmus Darwin anticipated the views touching the evolution of organic life subsequently announced by Lamarck, and ultimately incorporated by Charles Darwin in the theory that bears his name. The only taste kindred to natural history which Dr. Darwin possessed in common with his father and his son was a love of plants. The garden of his house in Shrewsbury, where Charles Dar-

win spent his boyhood, was filled with ornamental trees and shrubs, as well as fruit-trees.

When Charles Darwin was about eight years old, he was sent to a day-school, and it seems that even at this time his taste for natural history, and especially for collecting shells and minerals, was well developed. In the summer of 1818 he entered Dr. Butler's great school in Shrewsbury, well known to the amateur makers of Latin verse by the volume entitled "Sabrinæ Corolla." He expressed the opinion in later life that nothing could have been worse for the development of his mind than this school, as it was strictly classical, nothing else being taught except a little ancient biography and history. During his whole life he was singularly incapable of mastering any language. With respect to science, he continued collecting minerals with much zeal, and after reading White's "Selborne" he took much pleasure in watching the habits of birds. Towards the close of his school life he became deeply interested in chemistry, and was allowed to assist his elder brother in some laboratory experiments. In October, 1825, he proceeded to Edinburgh University, where he stayed for two years. He found the lectures intolerably dull, with the exception of those on chemistry. Curiously enough, while walking one day with a fellow-undergraduate, the latter burst forth in high admiration of Lamarck and his views on evolution. So far as Dar-

win could afterwards judge, no impression was made upon his own mind. He had previously read his grandfather's "Zoönomia," in which similar views had been propounded, but no discernible effect had been produced upon him. Nevertheless, it is probable enough that the hearing rather early in life such views maintained and praised may have favored his upholding them under a different form in the "Origin of Species."

While at Edinburgh, Darwin was a member of the Plinian Society, and read a couple of papers on some observations in natural history. After two sessions had been spent at Edinburgh, Darwin's father perceived that the young man did not like the thought of being a physician, and proposed that he should become a clergyman. In pursuance of this proposal, he went to the University of Cambridge in 1828, and three years later took a B.A. degree. In his autobiography the opinion is expressed that at Cambridge his time was wasted. It was there, however, that he became intimately acquainted with Professor Henslow, a man of remarkable acquirements in botany, entomology, chemistry, mineralogy, and geology. During his last year at Cambridge Darwin read with care and interest Humboldt's "Personal Narrative," and Sir John Herschel's "Introduction to the Study of Natural Philosophy." These books influenced him profoundly, arousing in him a burning desire to make even the most humble contribu-

tion to the structure of natural science. At Henslow's suggestion he began the study of biology, and in 1831 accompanied Professor Sedgwick in the latter's investigations amongst the older rocks in North Wales.

It was Professor Henslow who secured for young Darwin the appointment of naturalist to the voyage of the "Beagle." This voyage lasted from Dec. 27, 1831, to Oct. 2, 1836. The incidents of this voyage will be found set forth in Darwin's "Public Journeys." The observations made by him in geology, natural history, and botany gave him a place of considerable distinction among scientific men. In 1844 he published a series of observations on the volcanic islands visited during the voyage of the "Beagle," and two years later "Geological Observations on South America." These two books, together with a volume entitled "Coral Reefs," required four and a half years' steady work. In October, 1846, he began the studies embodied in "Cirripedia" (barnacles). The outcome of these studies was published in two thick volumes. The time came when Darwin doubted whether the work was worth the consumption of the time employed, but probably it proved of use to him when he had to discuss in the "Origin of Species" the principles of a natural classification. From September, 1854, and during the four ensuing years, Darwin devoted himself to observing and experimenting in relation to the transmutation of

species, and in arranging a huge pile of notes upon the subject. As early as October, 1838, it had occurred to him as probable, or at least possible, that amid the struggle for existence which everywhere goes on in the animal world, favorable variations would tend to be preserved, and unfavorable ones to be destroyed. The result would be the formation of new species.

It was not until June, 1842, however, that Darwin allowed himself the satisfaction of writing a very brief abstract of his theory in thirty-five pages. This was enlarged two years later into one of 230 pages. Early in 1856, Sir Charles Lyell, the well-known geologist advised him to write out his views upon the subject fully, and Darwin began to do so on a scale three or four times as extensive as that which was afterwards followed in his "Origin of Species." He got through about half the work on this scale. His plans were overthrown, owing to the curious circumstance that, in the summer of 1858, Mr. Alfred R. Wallace, who was then in the Malay archipelago, sent him an essay "On the Tendency of Varieties to depart indefinitely from the Original Type." It turned out upon perusal that this essay contained exactly the same theory as that which Darwin was engaged in elaborating. Mr. Wallace expressed the wish that, if Darwin thought well of the essay, he should send it to Lyell. It was Sir Charles Lyell and Sir Joseph Hooker who insisted that

Darwin should allow an abstract from his manuscript, together with a letter to Prof. Asa Gray, dated Sept. 5, 1857, to be published at the same time with Wallace's essay. Darwin was unwilling to take this course, being then unacquainted with Mr. Wallace's generous disposition. As a matter of fact, the joint productions excited very little attention, and the only published notice of them asserted that what was new in them was false, and that what was true was old. From the indifference evinced to the papers which first propounded the theory of natural selection, Darwin drew the inference that it is necessary for any new view to be explained at considerable length in order to obtain the public ear.

In September, 1858, Darwin, at the earnest advice of Lyell and Hooker, set to work to prepare a volume on the transmutation of species. The book cost him more than thirteen months' hard labor. It was published in November, 1859, under the title of "Origin of Species." This, which Darwin justly regarded as the chief work of his life, was from the first highly successful. The first edition was sold on the day of publication, and the book was presently translated into almost every European tongue. Darwin himself attributed the success of the "Origin" in large part to his having previously written two condensed sketches, and to his having finally made an abstract of a much larger manu-

script, which itself was an abstract. By this winnowing process he had been enabled to select the more striking facts and conclusions. As to the current assertion that the "Origin" succeeded because the subject was in the air, or because men's minds were prepared for it, Darwin was disposed to doubt whether this was strictly true. In previous years he had occasionally sounded not a few naturalists, and had never come across a single one who seemed to doubt about the permanence of species. Probably men's minds were prepared in this sense, that innumerable well-verified facts were stored away in the memories of naturalists, ready to take their proper places as soon as any theory which would account for them should be strongly supported. Darwin himself thought that he gained much by a delay in publishing, from about 1839, when the "Darwinian" theory was clearly conceived, to 1859; and that he lost nothing, because he cared very little whether men attributed most originality to him or to Wallace.

Darwin's "Variation of Animals and Plants under Domestication" was begun in 1860, but was not published till 1868. The book was a big one, and cost him four years and two months' hard labor. It gives in the first volume all his personal observations, and an immense number of facts, collected from various sources, about domestic productions, animal and vegetable. In

the second volume the causes and laws of variation, inheritance, etc., are discussed. Towards the end of the work is propounded the hypothesis of Pangenesis, which has been generally rejected, and which the author himself looked upon as unverified, although by it a remarkable number of isolated facts could be connected together and rendered intelligible.

The "Descent of Man" was published in February, 1871. Touching this work, Darwin has told us that, as soon as he had become (in 1837 or 1838) convinced that species were mutable productions, he could not avoid the belief that man must come under the same law. Accordingly, he collected notes on the subject for his own satisfaction, and not for a long time with any intention of publishing. In the "Origin of Species," the derivation of any particular species is never discussed; but in order that no honorable man should accuse him of concealing his views, Darwin had thought it best to add that by that work, "light would be thrown on the origin of man and his history." It would have impeded the acceptance of the theory of natural selection if Darwin had paraded, without giving any evidence, his conviction with respect to man's origin. When he found, however, that many naturalists accepted his doctrine of the evolution of species, it seemed to him advisable to work up such notes as he possessed, and to publish a special treatise on the origin

of man. He was the more glad to do so, as it gave him an opportunity of discussing at length sexual selection, a subject which had always interested him.

Darwin's book on the "Expression of Emotion in Men and Animals" was published in the autumn of 1872. This had been intended to form a chapter on the subject in the "Descent of Man," but as soon as Darwin began to put his notes together he saw that it would require a separate treatise. In July, 1875, appeared the book on "Insectivorous Plants." The fact that a plant should secrete, when properly excited, a fluid containing an acid and ferment closely analogous to the digestive fluid of an animal, was certainly a remarkable discovery. In the autumn of 1876 appeared "The Effects of Cross and Self Fertilization," a work in which are described the endless and wonderful contrivances for the transportation of pollen from one plant to another of the same species. About the same time was brought out an enlarged edition of the "Fertilization of Orchids," originally published in 1862. Among the minor works issued during the later years of Darwin's life may be mentioned particularly the little book on "The Formation of Vegetable Mould through the Action of Worms." This was the outgrowth of a short paper read before the Geological Society more than fourteen years before.

In order to appreciate the enormous amount of re-

search accomplished by Charles Darwin, it is needful to keep in mind the conditions of ill-health under which almost continually he worked. For nearly forty years he never knew one day of the health of ordinary men. His life was one long struggle against the weariness and drain of sickness. During his last ten years there were signs of amendment in several particulars, but a loss of physical vigor was apparent. Writing to a friend in 1881, he complained that he no longer had the heart or strength to begin any prolonged investigations. In February and March, 1882, he frequently experienced attacks of pain in the region of the heart, attended with irregularity of the pulse. On April 18 he fainted, and was brought back to consciousness with great difficulty. He seemed to recognize the approach of death, and said, "I am not the least afraid to die." On the afternoon of Wednesday, April 19, he passed away. On April 26 he was interred in Westminster Abbey. The funeral was attended by representatives of France, Germany, Italy, Spain, and Russia, and by delegates of the universities and learned societies of which he had been a member. Among the pall-bearers were Sir John Lubbock, Sir Joseph Hooker, Professor Huxley, Mr. A. R. Wallace, Mr. James Russell Lowell, the Duke of Argyll, and the Duke of Devonshire. The grave is appropriately placed in the north aisle of the nave, only a few feet from the last resting-place of Sir Isaac Newton.

II.

An outline of Darwin's personality would not be complete without a glance at some of his mental characteristics, and at his attitude toward religion. Of his intellectual powers, he himself speaks with extraordinary modesty in his autobiography. He points out that he always experienced much difficulty in expressing himself clearly and concisely, but he opines that this very difficulty may have had the compensating advantage of forcing him to think long and intently about every sentence, and thus enabling him to detect errors in reasoning and in his own observations, or in those of others. He disclaimed the possession of any great quickness of apprehension or wit, such as distinguished Huxley. He protested, also, that his power to follow a long and purely abstract train of thought was very limited, for which reason he felt certain that he never could have succeeded with metaphysics or mathematics. His memory, too, he described as extensive, but hazy. So poor in one sense was it that he never could remember for more than a few days a single date or a line of poetry. On the other hand, he did not accept as well founded the charge made by some of his critics that, while he was a good observer, he had no power of reasoning. This, he thought, could not be true, because the "Origin of Species" is one long argu-

ment from the beginning to the end, and has convinced many able men. No one, he submits, could have written it without possessing some power of reasoning. He was willing to assert that "I have a fair share of invention, and of common sense or judgment, such as every fairly successful lawyer or doctor must have, but not, I believe, in any higher degree." He adds humbly that perhaps he was "superior to the common run of men in noticing things which easily escape attention, and in observing them carefully."

Writing in the last year of his life, he expressed the opinion that in two or three respects his mind had changed during the preceding twenty or thirty years. Up to the age of thirty or beyond it poetry of many kinds gave him great pleasure. Formerly, too, pictures had given him considerable, and music very great, delight. In 1881, however, he said: "Now for many years I cannot endure to read a line of poetry; I have tried lately to read Shakspeare, and found it so intolerably dull that it nauseated me. I have also almost lost my taste for pictures or music. Music generally sets me thinking too energetically of what I have been at work on, instead of giving me pleasure. I retain some taste for fine scenery, but it does not cause me the exquisite delight which it formerly did." Darwin was convinced that the loss of these tastes was not only a loss of happiness, but might possibly

be injurious to the intellect, and more probably to the moral character, by enfeebling the emotional side of one's nature. So far as he could judge, his mind had become in his later years a kind of machine for grinding general laws out of large collections of facts, and that atrophy had taken place in that part of the brain on which the higher æsthetic tastes depend. Curiously enough, however, he retained his relish for novels, and for books on history, biography, and travels.

It is well known that Darwin was extremely reticent with regard to his religious views. He believed that a man's religion was essentially a private matter. Repeated attempts were made to draw him out upon the subject, and some of these were partially successful. Writing to a Dutch student in 1873, he said: "I may say that the impossibility of conceiving that this grand and wondrous universe, with our conscious selves, arose through chance seems to me the chief argument for the existence of God; but whether this is an argument of real value I have never been able to decide. I am aware that if we admit a First Cause, the mind still craves to know whence it came and how it arose. Nor can I overlook the difficulty from the immense amount of suffering through the world. I am also induced to defer to a certain extent to the judgment of the many able men who have fully believed in God; but here again I see how poor an argument this is.

The safest conclusion seems to me that the whole subject is beyond the scope of man's intellect; but man can do his duty." To questions put by a German student in 1879, he replied: "Science has nothing to do with Christ, except in so far as the habit of scientific research makes a man cautious in admitting evidence. For myself I do not believe that there ever has been any revelation. As for a future life, every man must judge for himself between conflicting vague probabilities." In the same year he told another correspondent: "In my most extreme fluctuations I have never been an atheist in the sense of denying the existence of a God. I think that generally (and more and more as I grow older), but not always, that an Agnostic would be the more correct description of my state of mind." His latest view is indicated in a letter dated July 3, 1881. Here he expressed the "inward conviction that the universe is not the result of chance." He adds, however: "But, then, with me the horrid doubt always arises whether the convictions of man's mind, which has been developed from the mind of the lower animals, are of any value, or at all trustworthy. Would any one trust the convictions in a monkey's mind, if there are any convictions in such a mind?" The Duke of Argyll has recorded the few words on the subject spoken by Darwin in the last year of his life. The Duke said that it was impossible to look at the wonder-

ful contrivances for certain purposes in nature, and fail to recognize that they were the effect and the expression of mind. Darwin looked at the Duke very hard, and said, "Well, that often comes over me with overwhelming force; but at other times" — here he shook his head vaguely — "it seems to go away."

III.

We pass to a consideration of Darwin's masterworks, the "Origin of Species," the "Variation of Animals and Plants under Domestication," and the "Descent of Man." Before indicating the conclusions reached in the first of these works, we should point out to what extent Darwin had been preceded by dissenters from the belief once almost universally entertained by biologists that species were independently created, and, once created, were immutable. Lamarck was the first naturalist whose divergent views upon the subject excited much attention. In writings published at various dates from 1801 to 1815, he upheld the doctrine that all species, including man, are descended from other species. He pronounced it probable that all changes in the organic, as well as in the inorganic world, were the result of law, and not of miraculous interposition. He seems to have been led to his opinion that the change of species had been gradual by the

difficulty experienced in distinguishing species from varieties by the almost perfect gradation of forms in certain groups, and by the analogy of domestic productions. With respect to the means of modification, he attributed something to the direct action of the physical conditions of life, something to the crossing of already existing forms, and much to use and disuse, or, in other words, to the effect of habit. Finally, he held that characters acquired by an existing individual might be transmitted to its offspring.

In 1813 Dr. W. C. Wells read before the Royal Society "An Account of a White Female, Part of whose Skin resembles that of a Negro." In this paper the author distinctly recognized the principle of natural selection, but applied it only to the races of man, and in man only to certain characters. After remarking that negroes and mulattoes enjoy an immunity from certain tropical diseases, he observed, first, that all animals tend to vary in some degree, and, secondly, that agriculturalists improve their domesticated animals by selection. He added that what is done in the latter case by art seems to be done with equal efficacy, though more slowly, by nature in the formation of varieties of mankind fitted for the countries which they inhabit. Again in 1831 Mr. Patrick Matthew published a work on "Naval Timber and Arboriculture," in which he put forth precisely the same view con-

cerning the origin of species as that propounded by Mr. Wallace and by Darwin. Unfortunately for himself, the view was cursorily suggested in scattered passages of an appendix to a work on a different subject, so that it remained unnoticed until Mr. Matthew himself drew attention to it in 1860, after the publication of the "Origin of Species." We observe finally that Mr. Herbert Spencer, in an essay published in 1852, and republished six years later, contrasted the theories of the creation and the development of organic beings. He argued from the analogy of domestic productions, from the changes which the embryos of many species undergo, from the difficulty of distinguishing species and varieties, and from the principle of general gradation, that species have been modified; and he attributed the modification to the change of circumstances.

The two volumes comprising the "Origin of Species" constitute, as the author said, one long argument. It is, of course, impossible in the space at our command to recapitulate in detail even the leading facts and inferences which are brought forward to prove that species have been modified during a long course of descent. We must confine ourselves to a succinct statement of the author's general conclusions. What he undertakes to prove is that the modification of species during a long course of descent has been effected chiefly through the natural selection of numerous successive slight

favorable variations, aided in an important manner by the inherited effects of the use and disuse of parts; and in an unimportant manner, — that is, in relation to adaptive structures, whether past or present, by the direct action of external conditions, and by variations which seem to us, in our ignorance, to arise spontaneously. It should be observed that Darwin does not attribute the modification exclusively to natural selection. What he asserts is: "I am convinced that natural selection has been the main, but not the exclusive, means of modification." He submits that a false theory would hardly explain in so satisfactory a manner as does the theory of natural selection the several large classes of facts marshalled in the two volumes now under review. If it be objected that this is an unsafe method of arguing, Darwin rejoins that it is a method usual in judging of the common events of life, and has often been used by the greatest natural philosophers. The undulatory theory of light, for instance, has thus been arrived at; and the belief in the revolution of the earth on its own axis was, until lately, supported by scarcely any direct evidence. It is no valid objection to the Darwinian theory of the origin of species that science as yet throws no light on the far higher problem of the essence or origin of life. Neither has any one explained what is the essence of the attraction of gravity, though nobody now objects to following out the results consequent on this unknown element of attraction.

Why, it may be asked, did nearly all the most eminent naturalists and geologists until recently decline to believe in the mutability of species? Darwin replies that the belief that species were immutable productions was almost unavoidable as long as the history of the world was thought to be of short duration. Even now that we have acquired some idea of the lapse of time, men are too apt to assume without proof that the geological record is so perfect that it would have afforded plain evidence of the mutation of species if they had really undergone mutation. The chief cause, however, of the once-prevalent unwillingness to admit that one species has given birth to other and distinct species is the fact that men are slow to admit great changes of which they do not see the steps. The difficulty is the same which was experienced by many geologists when Lyell first insisted that long lines of inland cliffs had been formed and great valleys excavated, not by catastrophes, but by the slow-moving agencies which we see still at work. The human mind cannot grasp the full meaning of the term of even a million years; cannot add up and perceive the full effects of many slight variations accumulated during an almost infinite number of generations.

When the first edition of the "Origin of Species" was published in 1859, Darwin wrote that he by no means expected to convince experienced naturalists

whose minds were stocked with a multitude of facts, all regarded during a long course of years from a point of view directly opposite to his. He looked forward with confidence, however, to the future, to young and rising naturalists, who would be able to view both sides of the question with impartiality. He predicted that, when the conclusions reached by him and by Mr. Wallace concerning the origin of species should be generally accepted, there would be a considerable revolution in natural history. Naturalists, for instance, would be forced to acknowledge that the only distinction between species and well-marked varieties is that the latter are known or believed to be connected at the present day by intermediate gradations, whereas species were formerly, though they are not now, thus connected. It might thus come to pass that forms generally acknowledged in 1859 to be merely varieties, would thereafter be thought worthy of specific names; in which case scientific and common language would come into accordance. In short, Darwin looked forward to the time when species would have to be treated in the same manner as genera are treated by those naturalists who admit that genera are merely artificial combinations made for convenience.

Darwin also foresaw that when his theory of the origin of species should be adopted, other and more general departments of natural history would rise

greatly in interest. The terms used by naturalists — such terms as affinity, relationship, community of type, paternity, morphology, adaptive characters, rudimentary and abortive organs, etc. — would cease to be metaphorical, and would have a plain signification. "When,' he wrote, "we no longer look at an organic being as a savage looks at a ship, as something wholly beyond his comprehension; when we regard every production of nature as one which has had a long history; when we contemplate every complex structure and instinct as the summing up of many contrivances, each useful to the possessor, in the same way as any great mechanical invention is the summing up of the labor, the experience, the reason, and even the blunders of numerous workmen; when we thus view each organic being, how far more interesting — I speak from experience — does the study of natural history become." Once more: "When we can feel assured that all the individuals of the same species, and all the closely allied species of most genera, have within a not very remote period descended from one parent, and have migrated from some one birthplace; and when we better know the many means of migration, then, by the light which geology now throws, and will continue to throw, on former changes of climate and of the level of the land, we shall surely be enabled to trace in an admirable manner the former migrations of the inhabitants of the whole world."

When Darwin published the "Origin of Species," he was aware that theologians and philosophers seemed to be fully satisfied with the view that each species had been independently created, and was immutable. To his own mind, however, it accorded better with what was known of the laws impressed on matter by the Creator that the production and extinction of the past and present inhabitants of the world should have been due to secondary causes like those determining the birth and death of the individual. "When I view," he said, "all beings not as special creations, but as the lineal descendants of some few beings which lived long before the first bed of the Cambrian system was deposited, they seem to me to become ennobled." And again: "As all the living forms of life are the lineal descendants of those which lived long before the Cambrian epoch, we may feel certain that the ordinary succession by generation has never once been broken, and that no cataclysm has desolated the whole world. Hence we may look with some confidence to a secure future of great length. And as natural selection works slowly by and for the good of each being, all corporeal and mental endowments will tend to progress towards perfection."

For his own part, Darwin could see no good reason why the views propounded in the two volumes comprising the "Origin of Species" should shock the re-

ligious feelings of any one. Touching the likelihood of such a result, he reassured himself by recalling the fact that the greatest discovery ever made by man — namely, the law of the attraction of gravitation — was attacked by Leibnitz "as subversive of natural, and inferentially, of revealed, religion." Darwin was confident that, if any such impressions were made by his theory, they would prove but transient, and that ultimately men would come to see that it is just as noble a conception of the Deity to believe that He created a few original forms capable of self-development into other and needful forms as to believe that it required the fresh act of creation to supply the voids caused by the action of His laws.

IV.

It was, as we have said, in 1868 that Darwin published the two volumes collectively entitled "Variation of Animals and Plants under Domestication." It is the second and largely corrected edition brought out in 1875 which we have under our eye. It is the outcome of the views maintained by the author in this work and elsewhere that not only the various domestic races but the most distinct genera and orders within the same great class — for instance, mammals, birds, reptiles, and fishes — are all the descendants of one common progenitor, and the whole vast amount of difference

between these forms has primarily arisen from simple variability. Darwin recognized that he who for the first time should consider the subject under this point of view would be struck dumb with amazement. He submits, however, that the amazement ought to be lessened when we reflect that beings almost infinite in number during an almost infinite lapse of time have often had their whole organization rendered in some degree plastic, and that each slight modification of structure which was in any way beneficial under excessively complex conditions of life has been preserved, whilst each which was in any way injurious has been rigorously destroyed. The long-continued accumulation of beneficial variations will infallibly have led to structures as diversified, as beautifully adapted for various purposes, and as excellently co-ordinated as we see in the animals and plants around us. Hence Darwin regards selection as the paramount power, whether applied by man to the formation of domestic beings or by nature to the production of species. Employing a favorite metaphor, he said: "If an architect were to rear a noble and commodious edifice without the use of cut stone, by selecting from the fragments at the base of a precipice wedge-form stones for his arches, elongated stones for his lintels, and flat stones for his roof, we should admire his skill and regard him as the paramount power. Now, the fragments of stone,

though indispensable to the architect, bear to the edifice built by him the same relation which the fluctuating variations of organic beings bear to the varied and admirable structures ultimately acquired by their modified descendants."

Some critics of the Darwinian theory of the origin of species have declared that natural selection explains nothing, unless the precise cause of each slight individual difference be made clear. Darwin rejoins that if it were explained to a savage utterly ignorant of the art of building how the edifice had been raised, stone upon stone, and why wedge-formed fragments were used for the arches, flat stones for the roof, etc.; and if the use of each part and of the whole building were pointed out, — it would be unreasonable if he declared that nothing had been made clear to him, because the precise cause of the shape of each fragment could not be told. This, in Darwin's opinion, is a nearly parallel case, with the objection that selection explains nothing because we know not the cause of each individual difference in the structure of each being. The shape of the fragments of stone at the base of the hypothetical precipice may be called accidental, but the term is not strictly applicable; for the shape of each depends on a long sequence of events, all obeying natural laws; on the nature of the rock, on the lines of deposition or cleavage, on the form of the mountain, which depends

on its upheaval and subsequent denudation, and, lastly, on the storm or earthquake which throws down the fragments.

In regard to the use, however, to which the fragments may be put, their shape may be strictly said to be accidental. Here Darwin acknowledged that we are brought face to face with a great difficulty in alluding to which he felt that he was travelling beyond his proper province. "An omniscient Creator must have foreseen every consequence which results from the laws imposed by Him. But can it be reasonably maintained that the Creator intentionally ordered, if we use the words in any ordinary sense, that certain fragments of rock should assume certain shapes, so that the builder might erect his edifice? If the various laws which have determined the shape of each fragment were not predetermined for the builder's sake, can it be maintained with any greater probability that He specially ordained for the sake of the breeder each of the innumerable variations in our domestic animals and plants, — many of these variations being of no service to man, and not beneficial, far more often injurious, to the creatures themselves? Did He ordain that the crop and tail-feathers of the pigeon should vary in order that the fancier might make his grotesque pouter and fan-tail breeds? Did He cause the frame and mental qualities of the dog to vary in order that a breed might be

formed of indomitable ferocity with jaws fitted to pin down the bull for man's brutal sport?"

It is obvious, however, that if we give up the principle in one case, — if we do not admit that the variations of the primeval dog were intentionally guided in order that the greyhound, for instance, that perfect image of symmetry and vigor, might be formed, — no shadow of reason can be assigned for the belief that variations similar in nature and the result of the same general laws which have been the groundwork through natural selection of the formation of the most perfectly adapted animals in the world, man included, were intentionally and specially guided. Darwin, therefore, was unable to follow the distinguished botanist, Prof. Asa Gray, in his belief that "variation has been led along certain beneficial lines," like a stream "along definite and useful lines of irrigation." Darwin's conclusion was that, if we assume that each particular variation was from the beginning of all time preordained, then that plasticity of organization which leads to many injurious deviations of structure, as well as the redundant power of reproduction which inevitably leads to a struggle for existence, and, as a consequence to a natural selection or survival of the fittest, must appear to us superfluous laws of nature.

V.

NEXT to the "Origin of Species," the volume which sets forth Darwin's theory of the "Descent of Man" naturally excited the most widespread attention. This book, which took the author three years to write, was published in 1871, a second and carefully revised edition appearing three years later. The data brought together occupy more than six hundred pages. The conclusions reached may be summed up in a few paragraphs. The principal induction from the evidence is that man is descended from some less highly organized form. It was Darwin's conviction that the grounds upon which this conclusion rests will never be shaken, for the close similarity between man and the lower animals in embryonic development, as well as in innumerable points of structure and constitution, both of high and of the most trifling importance, — the rudiments which he retains and the abnormal reversions to which he is occasionally liable, — are facts which cannot be disputed. Viewed in the light of our knowledge of the whole organic world, their meaning is unmistakable. The great principle of evolution stands out clear and firm when these groups of facts are considered in connection with others, such as the mutual affinities of the members of the same group, their geographical distribution in past and present times, and their geological

succession. It is pronounced incredible that all these facts should speak falsely. He who is not content to look like a savage at the phenomena of nature as disconnected cannot any longer believe that man is the product of a separate act of creation. He will be forced to admit that the close resemblance of the embryo of man to that, for instance, of a dog, — the construction of his skull, limbs, and whole frame on the same plan with that of other mammals, independently of the uses to which the parts may be put; the occasional reappearance of various structures, for instance, of several muscles which man does not normally possess, but which are common to the Quadrumana, and a crowd of analogous facts, — all point in the plainest manner to the conclusion that man is the co-descendant with other mammals of a common progenitor.

Darwin recognized that the high standard of our intellectual powers and moral disposition constitutes the greatest difficulty which presents itself after we have been driven by the mass of biological evidence to accept his conclusion as to the origin of man. Touching this point, he observes: "Every one who admits the principle of evolution must see that the mental powers of the higher animals, which are the same in kind with those of man, though so different in degree, are capable of advancement. Thus the interval between the mental powers of one of the higher apes and of a fish, or be-

tween those of an ant and scale-insect, is immense; yet their development does not offer any special difficulty, for with our domesticated animals the mental faculties are certainly variable, and the variations are inherited. No one doubts that their mental faculties are of the utmost importance to animals in a state of nature. Therefore the conditions are favorable for their development through natural selection. The same conclusion may be extended to man; the intellect must have been all-important to him, even at a very remote period, as enabling him to invent and use language, to make weapons, tools, traps, etc., whereby, with the aid of his social habits, he long ago became the most dominant of all living creatures."

It is further pointed out that a great stride in the development of man's intellect must have followed as soon as the half-art and half-instinct of language came into use; for the continued use of language must have reacted on the brain, and produced an inherited effect, and this again will have reacted on the improvement of language. The largeness of the brain in man relatively to his body, compared with the size of that organ in the lower animals, is attributable in chief part to the early use of some simple form of language, that engine which affixes signs to all sorts of objects and qualities, and excites trains of thought which would never arise from the mere impression of the senses, or, if they did

arise, could not be followed out. The higher intellectual powers of man, such as those of ratiocination, abstraction, self-consciousness, etc., probably follow from the continued improvement and exercise of the other mental faculties.

How man's moral qualities came to be developed is an interesting problem which is considered by Darwin at some length. He holds that their foundation lies in the social instincts under which term are included family ties. These instincts are highly complex, and, in the case of the lower animals, give special tendencies toward certain definite actions. But the more important elements are love and the distinct emotion of sympathy. Animals endowed with the social instincts take pleasure in one another's company, warn one another of danger, defend and aid one another in many ways. These instincts do not extend to all the individuals of the species, but only to those of the same community. As, however, they are highly beneficial to the species, they have in all probability been acquired through natural selection. In Darwin's judgment the moral nature of man has reached its present standard partly through the advancement of his reasoning powers, and consequently, of a just public opinion, but especially from his sympathies having been rendered more tender and widely diffused through the effects of habit, example, instruction, and reflection. It is pronounced

not improbable that, after long practice, virtuous tendencies may be inherited.

Let us look a little more closely at the matter, for the difficulty of explaining morality forms one of the greatest obstacles to the acceptance of the Darwinian account of the descent of man. What do we mean by a moral being? Manifestly, a moral being is one who is capable of reflecting on his past actions and their motives, and of approving of some while he disapproves of others. Man is the one being who certainly deserves this designation, though attempts have recently been made to show that a rudimentary morality may be traced in some of the lower animals. In the fourth chapter of the book before us, Darwin undertakes to demonstrate that the moral sense follows, — first, from the enduring and ever-present nature of the social instincts; secondly, from man's appreciation of the approbation and disapprobation of his fellows; and, thirdly, from the high activity of his mental faculties, with past impressions extremely vivid; in these latter respects he differs from the lower animals. Owing to this condition of mind, man cannot avoid looking both backwards and forwards, and comparing past impressions. Hence, after some temporary desire or passion has mastered his social instincts, he reflects and compares the now weakened impression of such past impulses with the ever-present social instincts; and he then feels that sense of

dissatisfaction which all unsatisfied instincts leave behind them, and resolves to act differently for the future. This dissatisfaction Darwin would identify with conscience. Any instinct permanently stronger or more enduring than another gives rise to a feeling which we express by saying that it *ought* to be obeyed. Darwin suggests that a pointer dog, if able to reflect on his past conduct, would say to himself I *ought* (as indeed we say of him) to have pointed at that hare, and not have yielded to the passing temptation of hunting it.

The belief in God has often been advanced as not only the greatest, but the most decisive, of all the distinctions between man and the lower animals. Darwin brings forward in the book before us a quantity of reasons for holding it to be impossible that this belief is innate or instinctive in man. In some races of men, for instance, we encounter a total want of the idea of God. On the other hand, a belief in all-pervading spiritual agencies seems to be universal, and apparently follows from a considerable advance in man's reason, and from a still greater advance in the faculties of imagination, curiosity, and wonder. "I am aware," says Darwin, "that the assumed instinctive belief in God has been used by many persons as an argument for His existence. But this is a rash argument, as we should thus be compelled to believe in the existence of many cruel and malignant spirits

only a little more powerful than man; for the belief in them is far more general than in a beneficent deity. The idea of a universal and beneficent Creator does not seem to arise in the mind of man until he has been elevated by long-continued culture."

How does the belief in the advancement of man from some low organized form bear on the belief in the immortality of the soul? Sir John Lubbock has proved that the barbarous races of man possess no clear belief of the kind; but, as Darwin continually reminds us, arguments derived from the primeval beliefs of savages are of little or no avail on either side of a question. Attention is directed by Darwin to the more relevant fact that few persons feel any anxiety from the impossibility of determining at what precise period in the development of the individual, from the first trace of a minute germinal vesicle, man becomes an immortal being. He submits that there should be no greater cause for anxiety because the period cannot possibly be determined in the gradually ascending organic scale.

Darwin was well aware that the conclusions arrived at in the work before us — namely, that man is descended from some lowly organized form — would be highly distasteful to many. The very persons, however, who regard the conclusions with distaste admit without hesitation that they are descended from barbarians. Darwin recalls the astonishment which he himself

felt on first seeing a party of Fuegians on a wild and broken shore, when the reflection rushed upon his mind that such men had been his ancestors. These men were absolutely naked and bedaubed with paint, their long hair was tangled, their mouths frothed with excitement, and their expression was wild, startled, and distrustful. They possessed hardly any arts, and, like wild animals, lived on what they could catch; they had no government, and were merciless to every one not of their own small tribe. Remembering the impression made on him by the Fuegians, Darwin suggests that he who has seen a savage in his native land will not feel much shame if forced to acknowledge that the blood of some more humble creature flows in his veins. "For my own part," he says, "I would as soon be descended from that heroic little monkey who braved his dreaded enemy in order to save the life of his keeper, — or from that old baboon, who, descending from the mountains, carried away in triumph his young comrade from a crowd of astonished dogs, — as from a savage who delights to torture his enemies, offers up bloody sacrifices, practises infanticide without remorse, treats his wives like slaves, knows no decency, and is haunted by the grossest superstitions." Darwin holds, in fine, that man may be excused for feeling some pride at having risen, though not through his own exertions, to the very summit of the organic

scale; it is further submitted that the fact of his having thus risen, instead of having been aboriginally placed there, may give him hope for a still higher destiny in the distant future.

As a scientist, however, Darwin is not concerned with hopes or fears, but simply with the truth, as man's reason enables him to discern it. We must recognize, he thinks, as the truth, established by an overwhelming array of inductive evidence, that man, with all his noble qualities, with sympathy which he feels for the most debased, with benevolence which extends not only to other men, but to the humblest living creature, with his godlike intellect, which has penetrated into the movements and constitution of the solar system — with all these exalted powers — man still bears in his bodily frame the indelible stamp of his lowly origin

VI.

We have said that Darwin's theory of the origin of species, together with its corollary, the descent of man, has met with almost universal acceptance by scientists. We have to use the qualifying adverb, because some of Darwin's contemporaries, including Virchow and Owen, not to mention St. George Mivart and the Duke of Argyll, have withheld their adhesion. Since his death, moreover, his disciples have tended to split into two

schools. On the one hand, Weismann has rejected the Lamarckian factors, — the effect of use and disuse upon organs, and the transmissibility of acquired characters. The importance of these factors has been emphatically re-asserted, on the other hand, by Lankester and others. Whether biologists, however, range themselves in the Neo-Darwinian or in the Neo-Lamarckian camp, the value of the principle of natural selection is acknowledged by all, and nobody now asserts the independent creation and permanence of species.

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JOHN ERICSSON.

1803–1889.

NAVIES OF WAR AND COMMERCE.

JOHN ERICSSON.

NAVIES OF WAR AND COMMERCE.

By W. F. DURAND, Ph.D.

THE exact combination of inspiration, heredity, and environment which serves to produce genius will perhaps ever be a problem beyond the skill of human intelligence. When the rare elements do combine, however, the result is always worthy of most careful study, both because great achievements furnish a healthy stimulus to emulation, and because some glimpse may be gained of Nature's working in the formation of her rarest products.

Few lives better illustrate these remarks than that of John Ericsson. Born of middle-class parentage and with no apparent source of heredity from which to draw the stores of genius which he displayed throughout his life, and with surroundings in boyhood but little calculated to awaken and inspire the life-work which later made him famous, from this beginning and with these early surroundings John Ericsson became

unquestionably the greatest of the engineers of the age in which he lived and of the century which witnessed such mighty advances along all engineering lines. The imprint left by Ericsson's life on the engineering practice of his age was deep and lasting, and if one may dare look into the future, the day is far removed when engineers will have passed beyond their dependence on his life and labors.

It is perhaps not amiss that, before looking more closely at the achievements of Ericsson's life and activity, note should be taken of the large dependence of our present civilization and mode of life on the engineer and his work.

In different ages of the world's history each has received its name, appropriate or fanciful as the case may have been. For the modern age no name is perhaps more adequately descriptive than the "Age of Energy," the age in which our entire fabric of civilization rests upon the utilization of the energies of nature for the needs of humanity, and to an extent little appreciated by those who have not considered the matter from this point of view. If we consider the various elements which enter into our modern civilization, — the items which enter into the daily life of the average man or woman; the items which we have come to consider as necessities and those which we may consider as luxuries; the items which go to make up

our needs as expressed in terms of shelter, food, intercommunication between man and his fellow, and pleasure, — the most casual consideration of such will serve to show distributed throughout almost the entire fabric of our civilization dependence at some point on the power of the steam-engine, the water-wheel, or windmill, the subtle electric current, or the heat-energy of coal, petroleum oil, or natural gas. The harnessing and efficient utilization of these great natural energies is the direct function of the engineer, or more especially of the dynamic engineer, and in this noble guild of workers, Ericsson carved for himself an enduring place and left behind a record which should serve as an inspiration to all who are following the same pathway in later years.

No one feature perhaps better differentiates our modern civilization from that of earlier times, four hundred years ago, or even one hundred, than that of intercommunication between man and his fellow. Compare the opportunities for such intercommunication in the present with those in the time of Queen Elizabeth, Sir Isaac Newton, George Washington, or Napoleon I. We now have our steamships, steam and electric railroads, cable, telegraph, and telephone. A few years ago not a single one was known. The modern age is one which demands the utmost in the possibility of communication between man and his kind, and in

this respect the wide world is now smaller than the confines of an English county a century ago.

In this field, as we shall see, Ericsson did some of his greatest work, and left perhaps his most permanent record for the future.

Ericsson's life falls most naturally into three periods chronologically or geographically, and likewise into three periods professionally, though the latter mode of subdivision has by no means the same boundaries as the former. The first mode of subdivision gives us the life in Sweden, the life in England, and the life in the United States. The second mode gives us the life of struggle and obscurity, the life of struggle, achievement, and recognition, and the calmer and easier life of declining years with recognition, reward, and the assurance of a life's work well done.

John Ericsson was born in the province of Vermland, Sweden, in 1803. His father was Olof Ericsson, a mine owner and inspector who was well educated after the standard of his times, having graduated at the college in Karlstad, the principal town of the province. His mother was Britta Sophia Yngstrom, a woman of Flemish-Scotch descent, and to whom Ericsson seems to have owed many of his stronger characteristics. Three children were born: Caroline in 1800, Nils in 1802, and John in 1803. Of John's earliest boyhood we have but slight record, but there

seems to have been a clear foreshadowing of his future genius. He was considered the wonder of the neighborhood, and busied himself day after day with the machinery of the mines, drawing the form on paper with his rude tools or making models with bits of wood and cord, and endeavoring thus to trace the mystery of its operation.

In 1811 the Ericsson family fell upon evil times. Due to a war with Russia, business became disturbed and in the end Olof Ericsson became financially ruined. This brought the little family face to face with the realities of life, and we soon after find the father occupying a position as inspector on the Göta Canal, a project which was just then occupying serious attention after having been neglected for nearly one hundred years, and nearly three hundred years after it was first proposed in 1526. Through this connection, in 1815, John and Nils Ericsson were appointed as cadets in a corps of Mechanical Engineers to be employed in carrying out the Government's plans with reference to the canal. During the winter of 1816–17 and at the age of thirteen, John Ericsson received regular instruction from some of his officers in Algebra, Chemistry, Field Drawing, and Geometry, and the English language. Ericsson's education previous to this seems to have consisted chiefly in lessons at home or from tutors, after the manner of the time. He had thus received

instruction in the ordinary branches and in drawing and some chemistry. His training in drawing seems to have been unusually thorough and comprehensive, and with a natural genius for such work, his later remarkable skill at the drawing board is doubtless in no small measure due to the excellent instruction which he received in his early years. His progress in his duties as a young engineer was rapid, and he was soon given employment in connection with the canal-work, involving much responsibility and calling for experience and skill.

At length on reaching the age of seventeen he became stirred with military ambition, and, dissatisfied with his present prospects, he left his position with its opportunities for the future, and entered the Swedish army as ensign of a regiment of Field Chasseurs. This regiment was famous for its rifle practice, and Ericsson was soon one of its most expert marksmen. The routine of army life was, however, far from being sufficient to satisfy the uneasy genius of John Ericsson, and we soon find him engaged in topographical surveying for the Government, and so rapid and industrious in his work that as the surveyors were paid in accordance with the amount accomplished, he was carried on the pay rolls as two men, and paid as such, in order that the amount which he received might not seem too excessive for one individual. Even this was not suffi-

cient to exhaust his energy, and about this time he conceived the idea of publishing a book of plates descriptive of the machinery commonly employed in the mining operations of his day. To this end he collected a large number of sketches which he had prepared in his earlier years, and made arrangements to take up the work of preparation for publication. The drawings selected were to be engraved for the book, and, nothing daunted by the undertaking, Ericsson proposed to do this work himself. After some discouragement the engraving was undertaken, and eighteen copper plates of the sixty-five selected, averaging in size fifteen by twenty inches, were completed within a year. In various ways the project met with delays, and it soon became apparent that the rapid advance in the applications of machinery to mining would render the work out of date, and it was at length abandoned.

At about this time Ericsson seems to have taken up seriously his work on his so-called "flame-engine," certain experiments made by his father having suggested to him the hope that a source of power might in this way be developed which would be more economical than the steam-engine. At this point we see entering into Ericsson's life an idea which never left him, which controlled much of his work in mid-life, and which attracted no small part of his attention throughout his closing years. This idea was the dis-

covery of some form of heat-engine which should be more economical than the steam-engine, especially as it was in his day. The flame-engine idea grew rapidly, and soon absorbed his chief attention. Military life now lost its attraction, and in 1826 obtaining leave of absence he left his native land and turned his face toward London, doubtless with the hope strong within him that a substitute for the steam-engine had been found, and that his future lay secure and easy before him.

The characteristic features of Ericsson's life up to this time, when he had reached his twenty-third year, are energy, industry, independence, all in most pronounced degree, and combined with a most astonishing insight into mechanical and scientific questions. It was not a period of achievement, but one of formation and of development in those qualities which were soon to make him famous in both worlds. Of his work during this period of life little or nothing outside the idea embodied in the flame-engine can be said to belong to the permanent record of his life's achievement. This appeared in the "Caloric" engine, and still later in the well-known Ericsson "Air" engine of the present day.

This era was one of development and promise, and richly were the promises fulfilled in the achievements of his later years. A careful study of his life

to this point is sufficient to show that, with health and time, such a nature would certainly leave a mark wide and deep on the world in which it was placed. His characteristics were such that achievement was the very essence of life, and, with the promise and potency as revealed in this first twenty-three years of his life, we may be well prepared for the brilliant record of the remaining sixty-three.

With Ericsson's arrival in London began the second important period of his life. His first efforts were directed toward the introduction of the flame-engine, but he soon found unexpected difficulties in the use of coal as fuel instead of wood, and it became clear that in order to live he must turn his attention to other matters for a time. Then followed a series of remarkable pieces of work in which Ericsson's genius showed itself, either in original invention or in the adaptation and improvement of the existing facts and material of engineering practice. While thus occupied, his leave from his regiment expired, and he seems to have overlooked taking proper steps to have it renewed. He was thus placed technically in the attitude of a deserter. Through the intervention of a friend, however, he was soon afterward restored, and promoted to the rank of Captain in the Swedish Army. This commission he immediately resigned, and thus his record became technically cleared of all reproach.

To give a mere list of the work with which Ericsson was occupied during the years from 1827 to 1839, when he removed to the United States, would be no small task, and reference to the more important only can be here made. Compressed air for transmitting power, forced draft for boilers by means of centrifugal blowers, steam boilers of new and improved types, the surface condenser for marine engines, the location of the engines of a ship for war purposes below the water line, the steam fire-engine, the design and construction of the "Novelty" (a locomotive for the Rainhill contest in 1829, when Stephenson's "Rocket" was awarded the prize, though Ericsson, heavily handicapped in time and by lack of a track on which to adjust and perfect the "Novelty," achieved a result apparently in many ways superior to Stephenson's with the "Rocket"), various designs for rotary engines, an apparatus for making salt from brine, further experimental work with various forms of heat, or so-called "caloric" engines, and the final development, in 1833, of a type from which great results were for a time expected, superheated steam and engines for its use, a deep-sea-sounding apparatus embodying the same principle as that later developed by Lord Kelvin in the well-known apparatus of the present day, a machine for cutting files automatically, various types of steam-engines, and finally his work in connection with the introduction

of the screw-propeller as a means of propulsion for steam vessels. These are some of the important lines of work on which Ericsson was engaged during the twelve years of his life in London. In connection with some he was undoubtedly a pioneer, and deserves credit as an original inventor; in connection with others, his work was that of improvement or adaptation; but in all his influence was profound, and the legacy which we have received from this period of engineering progress is due in no small degree to Ericsson, and to his work in London during these years. At a later point we shall refer in some further detail to these questions, but desire for the moment, rather, to gain a broad and comprehensive view of his life as a whole.

Ericsson has been by some called a spendthrift in invention, and the term is not without some justice in its application. His genius was uneasy, and his mind was oppressed by the wealth of his ideas. It was this very wealth which led him from one idea to another, without always taking sufficient time in which to develop and perfect his plans. Rich in invention, he cared but little for exploitation, and when the truth of his predictions was demonstrated, or the ground of his expectation justified, he was eager for new achievements and new combinations of the materials of engineering progress. In this spirit of struggle and unrest, he passed the years in London, rapidly becoming known

for his versatility in invention, and for his daring and originality in the details of his engineering work. From 1833 to 1839, or during the second half of this term of residence in London, he became in increasing measure absorbed in his work connected with the screw-propeller as a means of marine propulsion.

Ericsson's name in the popular mind has been most commonly associated with the "Monitor" and her fight with the "Merrimac" in the Civil War, and next, probably, with the screw-propeller as a means of marine propulsion. It will, therefore, be proper at the present point to refer in some further detail to the circumstances connected with his relation to the introduction of the screw-propeller.

Regarding this question an entire volume might be written without doing more than justice to the subject, but only a brief statement of the chief facts can be here attempted.

As early as the Seventeenth Century the possibility of developing a propulsive thrust by the use of a submerged helicoidal, or screw, propeller, had been vaguely recognized, and during the following, or Eighteenth Century, the same idea had been brought forward. It had been viewed in this connection, however, merely as a curiosity, and led to no immediate results. Later, in 1804, Francis B. Stevens, of New Jersey, in an experimental boat on the Hudson, operated twin screws, and

demonstrated their applicability to the requirements of marine practice. These propellers, in fact, had a form far more nearly approaching the modern screw-propeller than did those which came somewhat later, and which marked the real entry of the screw-propeller into actual and practical service.

Again, in 1812, Ressel, a student in the University of Vienna, began to study the screw-propeller, and his first drawing dates from this time. In 1826 he carried on experiments in a barge driven by hand, and in 1827 an Austrian patent was granted him. Two years later he applied his screw to a boat with an engine of six horse-power, and a speed of six miles per hour was said to have been attained. Then came a bursting steam-pipe, and the police put a stop to the experiments, which seem to have had no further results.

Likewise in 1823 Captain Delisle, of the French Engineers, presented a memorial to his Government in which he urged the use of the submerged propeller for the propulsion of steam vessels. No especial attention was given to the suggestion, however, and it was apparently forgotten until later, when the propeller had become a demonstrated success. Then this memorial was remembered, and its author brought forward to receive his share of credit in connection with the adaptation of the propeller to marine propulsion.

These various attempts to introduce the screw-pro-

peller seem curiously enough to have had no lasting result. They were not followed up, and in the mean time had to some extent passed out of memory, or, if remembered, the absence of result can hardly have acted as an incentive to fresh effort. At the same time it must be admitted that the screw-propeller as a possibility for marine propulsion was known in a vague way to the engineering practice of the day, and it is at this time of course quite impossible to say how much may have been known by Ericsson, Smith, or others concerned in later developments, or to what extent they may have been dependent for suggestion on what had preceded them. The question of who invented the screw-propeller in the absolute sense is entirely futile and without answer. No one could ever have reasonably advanced any such unique claim. At the best it is simply a question of the relative influence in the introduction, improvement, and practical application of what was the common property of the engineering practice of the day.

In 1833, or at the period now under consideration, however, the paddle-wheel was the recognized instrument of marine propulsion. Since the beginning of the century it had been growing in use with the gradual growth in the application of steam, and at this time it held the field alone. Some years earlier it appears that some of the objections to the paddle-wheel had

become plainly apparent to Ericsson, although, occupied with other matters as he was, there was no immediate result. He apparently recognized that the slow revolutions possible with the paddle-wheel did not favor the improvement of the steam-engine along the lines which have since been followed, and he saw clearly that for warship purposes the engines employed, exposed above the water-line to destruction from the shell of an enemy, were entirely out of the question. Finally in 1833 and 1834 we find him employed by a carrying company in London to conduct numerous trials with submerged propellers in the London and Birmingham canal. In an affidavit made in March, 1845, he states that in 1833 his attention was particularly called to the subject of oblique propulsion, and that under his direction propellers of various patterns and embodying these principles were fitted on a canal-boat named the "Francis," and later in 1834 to another called the "Annatorius." Shortly after this, or in 1835, his ideas took more definite form, and he refers to his work in a letter to his friend John Bourne in the following terms:—

"1835. Designed a rotary propeller to be actuated by steam-power consisting of a series of segments of a screw attached to a thin broad hoop supported by arms so twisted as also to form part of a screw. The propeller subsequently applied to the steamship 'Princeton' was identical with my

said design of 1835. Even the mode adopted to determine, by geometrical construction, the twist of the blades and arms of the 'Princeton's' and other propellers was identical with my design of the year last mentioned."

At about this same time, or in 1835, the attention of Mr. F. P. Smith seems to have been drawn to the subject of the screw-propeller, and we find him taking out a patent for his form, consisting of an elongated helix or spiral of several turns, under date of May 31, 1836. Ericsson's patent followed some six weeks later, or on July 13, 1836. While it thus appears that Ericsson had been studying the problem since 1833 or earlier, according to his own statements, there is no evidence that Smith's attention was drawn to the matter earlier than 1835. Delay on Ericsson's part in the matter of patent gives the earlier date to Smith. The mere date of a patent, however, is of small moment for our present purposes. It must be admitted that the modern form of screw-propeller is quite unlike either of these original forms, although they all involve of course the same fundamental principles. Ericsson's propeller may properly be called an engineering success, built on sound principles, but improved and largely modified by the results of later experience and research. Smith's propeller, while capable of propelling a boat, was the design of an amateur rather than of an engineer, and in comparison with Ericsson's seemed to show a somewhat

less accurate appreciation of the underlying principles upon which the propeller operates.

In the present case, as we have noted above, the question is not so much one of invention as of influence in introduction, adaptation, and improvement. The screw-propeller was already known, but had not been introduced into and made a part of actual engineering practice. Services in this direction are all that can be claimed for any of those concerned with the question during the third decade of the Nineteenth Century. From this point of view we must give to Ericsson large credit. He had the courage of his convictions, and did not allow his work in this direction to lapse for lack of effort on his part to secure its introduction into the practice of the day.

Thus, in 1837, the "Francis B. Ogden" was built for the special purpose of testing the power of the screw-propeller, and was operated on the Thames for the benefit of the British Admiralty and many others. Shortly after this, and largely through the influence of Capt. Robert F. Stockton of the American Navy and Francis B. Ogden, the American Consul at Liverpool, Ericsson began to consider a visit to the United States for the purpose of building, under Stockton's auspices, a vessel for the United States Navy. While these negotiations were under way, in 1838, he built for Captain Stockton a screw-steamer named the "Robert F.

Stockton," the trials of which attracted much attention from the public at large and from engineers of the time. At about the same period Ericsson's propeller was fitted to a canal-boat called the "Novelty," plying between Manchester and London. This was presumably the first instance of a screw-propeller employed on a vessel actually used for commercial purposes.

Finally, in pursuance of Ericsson's plans with Captain Stockton, he left England Nov. 1, 1839, and started for New York in the steamer "Great Western," where he arrived November 23, after a long and stormy passage.

We now reach the final scene of Ericsson's life and professional activities. His visit was at first intended only as temporary, and he seems to have anticipated an early return after carrying out his plans with reference to a ship for the United States Navy. To quote from a letter to his friend, Mr. John O. Sargent, he says: "I visited this country at Mr. Ogden's most earnest solicitations to introduce my propeller on the canals and inland waters of the United States. I had at the same time strong reasons for supposing that Stockton would be able to start the 'big frigate' for which I had prepared such laborious plans in England." The event was otherwise determined, however, and during the remaining fifty years of his life he lived and wrought in the New World, and as a citizen of his adopted country.

If the record of his twelve years of work in London was long, that for the remaining and maturer years of his life may well be imagined as vastly greater. During the earlier part of this period, or until the Civil War, when all his energies were concentrated upon his work in connection with the "Monitor" type of warship, we find the same wealth of invention and human energy, but for the most part directed along lines related to marine and naval construction. It was a period of training for the fuller fruitage of his genius during the Civil War.

Shortly after his arrival, or in 1840, a prize was offered by the Mechanics' Institute of New York for the best plan of a steam fire-engine. With his previous experience in London, Ericsson easily carried off the palm and was awarded the prize. He further occupied himself with the introduction of propellers on boats engaged in the inland navigation of the United States, with the design and construction of the United States steam frigate "Princeton," with the development of the compound principle in the steam-engine, then in 1851 with his hot-air ship "Ericsson," or ship propelled by hot-air or caloric engines, as they were then termed, and later with caloric engines in smaller sizes for stationary purposes, of which several thousand were sold during the next succeeding years.

In the work of introducing his propellers good prog-

ress was made, especially in boats built for use on the Great Lakes, so that by 1844, when the U. S. S. "Princeton" went into commission, there were in use some twenty-five vessels with the screw-propeller as a means of propulsion.

The project of building a vessel for the American Navy, the purpose which had most strongly attracted Ericsson to the United States, suffered long delay in connection with the arrangements between Captain Stockton and the naval authorities at Washington. At length, in 1841, Captain Stockton was authorized to proceed with the construction of a screw steam frigate of about one thousand tons. This was the U. S. S. "Princeton," which marks an epoch as the first screw vessel-of-war. She was followed by the French "Pomone" in 1843, and the English "Amphion" in 1844, for the equipment of which Ericsson's agent in England, Count Von Rosen, received commissions from the French and English governments respectively.

The "Princeton" was completed in due time and was equipped with two 12-inch wrought-iron guns, one brought by Ericsson from England and one designed and built under the direction of Captain Stockton. At the trials of the ship in 1844 the latter gun exploded, killing the Secretaries of State and of the Navy, besides other prominent visitors on board, and wounding several others. This terrible disaster threw an entirely unde-

served stigma upon the ship herself and upon Ericsson's work, and it was not until many years after that his name was entirely free from some kind of reproach in connection with the "Princeton" and the deplorable results of the accident on board.

These are some of the principal lines of work with which Ericsson occupied himself during the twenty-two years between 1839 and 1861. At the latter date came the supreme opportunity of his life, and his services in the art of naval construction during the remainder of the Civil War, which was then in progress, are a part of the history of that great struggle. Here, as with the propeller, volumes might be written in the attempt to give a full account of the inception, growth, and final vindication of Ericsson's ideas regarding naval offence and defence, as expressed by the means available in the engineering practice of the day. The leading points only can be summarized.

The question of armored ships was in the air. The advantages of armor had been already demonstrated on the French ship "Gloire" and others in connection with the naval part of the Crimean War, and there was a feeling that ironclads of some kind were a necessity of the situation. These facts were perhaps more clearly realized at the South than at the North; and early in 1861 we find Mr. Stephen R. Mallory, the Confederate Secretary of the Navy, taking active steps

to raise the "Merrimac," which had been sunken at the Norfolk Navy Yard, and convert her into an armor-clad. Information regarding this project naturally became known to the Federal authorities, and occasioned President Lincoln and the entire Cabinet the most serious anxiety. At length on August 3, 1861, the appointment of a Board was authorized, the duty of which it should be to examine into the question fully, obtain plans, and recommend the construction of such armor-clads as they should judge best suited to the demands of the situation.

Shortly after this. Ericsson forwarded to President Lincoln a communication in which he offered to construct a vessel "for the destruction of the Rebel fleet at Norfolk and for scouring the Southern rivers and inlets of all craft protected by Rebel batteries." For one reason or another this communication does not seem to have produced any immediate result. Later, however, when the Board made its report dated September 16, they registered the opinion that the present demand called for "vessels invulnerable to shot, of light draft of water, before going into a more perfect system of large iron-clad seagoing vessels of war." In pursuance of this idea they recommended the construction of three vessels, — Ericsson's floating battery, a broadside vessel later known as the "Ironsides," and the "Galena." Mr. C. S. Bushnell, who was instru-

mental in bringing Ericsson's plans actually before the Board, later associated with himself and Ericsson in the project two gentlemen of means, and large manufacturers of iron plate, Mr. John A. Griswold and Mr. John F. Winslow, who advanced most of the money needed, Mr. Bushnell supplying the remainder. The keel was laid Oct. 25, 1861, and the "Monitor," as she was named by Ericsson, was launched Jan. 30, 1862, and was turned over to the Government Feb. 19, 1862. This brief record of construction leaves untold all history of the ceaseless struggle against time and of the superb organization and distribution of the work which made possible the completion of such a piece of work in the period of one hundred working days.

One important fact which goes far to explain this astonishing speed in design and construction is found in the fact that Ericsson was not dealing with an entirely new and freshly developed proposition. He has stated that the thought of a floating battery, which should be small in size, but impregnable to the heaviest guns known and yet heavily armed herself, had long occupied his thoughts in connection with the problem of the defence of Sweden. Ericsson never forgot his native land, and gave to her political troubles and to the question of her defence against her more powerful neighbors much serious thought. As a result of this study, he had produced as early as 1854 a design em-

bodying all the essential features of the "Monitor," and tl is design, shown by a model, was in that year sent to Napoleon III., who was then at war with Russia. This was in the hope that he might in this way contribute to the overthrow of the latter, the hereditary enemy of his native land.

The design, however, was not adopted, and after it was returned was laid aside to collect the dust of his office, until the experiences of the Civil War brought it again to the light. The plan in all its main features had therefore long been matured, and it only remained to proceed rapidly with the details and with the realization of the idea in the most suitable materials to be obtained.

The result of the battle between the "Monitor" and the "Merrimac" in Hampton Roads is a part of history. The relentless devastation which the latter had begun on the old wooden ships of the American Navy at Hampton Roads was stayed, and the wild fears at the North concerning the destruction which she might cause to the shipping and to the seaboard cities was calmed. The "Merrimac" met her master, and retired from the conflict crippled and shorn of power for further evil. A short time later she sank beneath the waters of the Chesapeake, and is now remembered only as the antagonist of the "Monitor."

If the result of this battle between the "Monitor" and

the "Merrimac" marked a turning-point in the naval aspect of the Civil War, it wrought a no less marked change in the standing and fortunes of her designer. Some of his engineering efforts had not met with the success for which he or his friends had hoped. The engines of the air-ship, while a success as a piece of mechanism, were so enormous and heavy that she had to be considered as a commercial failure, and the venture was not repeated; the deplorable accident on the "Princeton" was by some held to be in part chargeable to Ericsson, though a later and full knowledge of the circumstances shows that such was in no wise the case. Again, Ericsson, as an experimenter and pioneer, was by some considered as a dreamer, and before the "Monitor" was completed there was no lack of croakers who prophesied failure or who openly ridiculed the idea. This condition was of course natural. In many ways Ericsson was ahead of his age; and, again, it must not be supposed that he avoided mistakes or that all of his work fully realized the expectations which were based upon it. Furthermore, Ericsson's spirit was proud, and he was little disposed to accept criticism from those whom he felt to be unqualified to pass adequate judgment on his work, while he was especially impatient under the system by which government work was done. He was therefore but little disposed to pleasantly submit to the exasperating delays and interferences with

his work which arose from the methods of doing public business, and it is no more than the simple truth to say that during the preceding years the relations between Ericsson and the officials of the Navy Department had often become seriously strained, and they were seldom in cordial accord regarding the various questions which arose in connection with his public work.

With the demonstration made by the "Monitor," however, the attitude of the public changed in a moment, and Ericsson was hailed on every hand as a public benefactor. He received the thanks of Congress on March 28, 1862, and of the Legislature of the State of New York a little later. Besides these, he was the recipient of numbers of memorials and mementoes, and of such praise in every form as might well have disturbed the equilibrium of a mind less well balanced. In all this change of public opinion, the one thing which must have given him the deepest satisfaction was the change in the attitude of the naval authorities at Washington. He was now considered as one whose ideas had demonstrated their right to serious and respectful attention, and a large fleet of vessels of the monitor type was ordered, similar to but larger than the prototype, and containing such minor changes as experience had suggested. Yet even this was not accomplished without objection. The officers of the navy were accustomed to the old type of wooden ship, and

were slow to realize that naval war was, after all, an engineering problem, and that the ideas of the engineer must now be substituted for those which had been sanctified by long ages of past experience. Still, the demonstration was too convincing to admit of serious question, and Ericsson and his associates in business were busily occupied during the remainder of the war in the design and construction of a numerous fleet of vessels of the monitor type.

Ericsson's work during this period was enormous. One design followed another in quick succession, while work of supervision and inspection and cares of a business nature all combined to make a burden which would have broken down a nature less determined and self-centred, and a body less inured to physical endurance and sustained nervous tension.

This prodigious load was not so much but that he found time to devote to the needs of other nations, and in 1862 he offered to construct for the Chilian government a monitor similar to those under construction for the United States, while later a similar offer was made to the Peruvian Government. With the close of the Civil War Ericsson found still further time to devote to the introduction of this type of vessel into foreign navies, and a considerable part of his time seems to have been occupied with projects of this character, and more particularly with the question of the naval de-

fence of his native land. As regards the introduction of warships of the monitor type, the results were not so pronounced as might have been expected, and while the influence of the idea is seen in the practice of every maritime nation in regard to the construction of its warships, still, for the most part, the leading nations preferred to make application of the idea in their own way rather than order such vessels direct from their original designer. Yet in not a few cases the original type was faithfully copied, though it is not always clear to what extent Ericsson himself may have had direct contact with their designs. In 1866 the Swedes were able to test the first of a small fleet of monitors built after Ericsson's plans. This was called the "John Ericsson," and was armed with two 15-inch guns presented to Sweden by Ericsson himself. Later, in 1868, he designed for Spain and superintended the construction of thirty small gunboats for use in Cuban waters.

For nearly ten years now Ericsson had devoted most of his energies to the art of war. It was a time of change and unrest. Heavy guns and armor had brought about a complete break with the past. The torpedo, which had made its appearance in crude form during the Civil War, was attracting more and more attention, and questions of naval offence and defence and of the best governmental policy were attracting the serious attention of all whose duty led them into relation with

such matters. Into this problem in its broadest aspects Ericsson threw himself in the early 'seventies with all the ardor of his younger days.

It is proper to explain here that there was one feature of the earlier plans which were submitted to Napoleon III. in 1854, which he did not embody in the "Monitor," and which, indeed, was omitted from all published plans and descriptions of the system given out in former years. This was a system of submarine or subaqueous attack, which, he states in a letter to John Bourne, had attracted his attention since 1826. The time now seemed ripe for the presentation and development of this idea, and he accordingly developed his designs for a torpedo, and for a method of firing it under water from a gun carried in the bow of a boat, and suitably opening to allow the discharge of the torpedo projectile. This was Ericsson's so-called "Destroyer" system, and was embodied finally in a boat called the "Destroyer," which he built in company with his friend, Mr. C. H. Delamater, and with which he carried on numerous experiments. In the end, however, the system did not commend itself to the naval authorities, and the "Destroyer" was left on her designer's hands, an instance of difference of opinion between Ericsson and those charged with the duty of naval administration, and with no supreme test of war to provide opportunity for the determination as to which were the more correct

in their judgment. With the "Destroyer," and his work in connection with her, closes the record of Ericsson's connection with the advance in naval construction.

During these later years of his life it must not be supposed that he was less busily occupied than in earlier life. His was a nature which knew no rest, and to the last day of his life he was literally in the harness. Only brief mention however can be made of some of the more important lines of work which interested the closing years of Ericsson's life.

In connection with his naval designs, he devoted much study to the improvement of heavy ordnance, both as to the gun and its mounting. In particular, his mounting of the guns in the "Monitor" was quite original, and the friction arrangement for absorbing the recoil was a great improvement over methods then in use, and served as a model for many copies and adaptations of the same principles in later years by other designers. In 1863 he also designed and built for the acceptance of the Government a forged 13-inch wrought-iron gun. While his design was an advance on those of the day, the demands on the makers of iron forgings were more than could be successfully met, and the gun developed some slight cracks in the test, which prevented further developments on this line. Ericsson always maintained that the tests to which this gun was submitted were unfairly severe, and he showed how the

defects could be remedied by a steel lining. But the Naval Bureau of Ordnance insisted that this should be done at his own expense, and as he had already lost some $20,000 on the gun, he was unwilling to proceed farther, and the matter was allowed to lapse.

Throughout his entire career the improvement of the steam-engine occupied a large share of Ericsson's attention, and in particular was this the case in connection with his naval designs. From the "Princeton," in 1841, to the "Destroyer," in 1878, there succeeded one long series of types and forms of steam-engine, each in his opinion the best adapted to the circumstances of the case. Naturally, opinions differ, and he was brought into competition with other able engineers, and his designs were often called into question or subjected to criticism. In 1863, in competition with Chief Engineer Isherwood of the navy, engines were designed for twin ships, the "Madawaska," afterward known as the "Tennessee," and the "Wampanoag," afterward called the "Florida." This was a battle royal of types and modes of application of the power of the steam-engine to the propulsion of ships. The result was a victory for Isherwood, although the "Madawaska," which was first subjected to trial, made a speed higher than any warship at that time afloat. This was exceeded by the "Wampanoag" a short time later; but neither engine was of an enduring type, and after a

time the machinery of the "Madawaska" was removed, and she was repowered with a later type of machinery, and long did service as the "Tennessee" in the list of wooden frigates of the navy. The "Florida" was too expensive to maintain in commission, and the special circumstances which had called her into existence having passed by, she was laid up at New London, and never again saw active service.

Keenly as Ericsson was interested in the steam-engine, it must be admitted that he always showed a more profound interest in some form of engine which should be able to displace it with a superior efficiency; and hence his long series of efforts relating to the flame-engine, the caloric engine, the gas-engine, and finally the solar engine, — with either steam or heated air as the medium for carrying the heat. During the last years of his life some of his most patient and careful study was given to the perfection of a solar engine, or engine for utilizing directly the heat of the sun instead of that of coal or other carbon compounds. Besides this direct line of study and experimentation, he gave during these years much thought to various scientific problems connected with solar energy, the tides, gravitation, the nature of heat, etc., etc. A plan for deriving power direct from the tides, improvements in high-speed engines for electric-lighting purposes, further improvements in his hot-air engine in small sizes for

commercial purposes, — these are some of the further lines of work which occupied the attention of his closing years.

But the most cunningly devised of all mechanisms, the heart and brain, must sooner or later tire and cease from their labors. The motive energy becomes exhausted, and the mechanism must cease its work. So it was with John Ericsson. In the first hour of the morning of March 8, 1889, Ericsson died. This was within one day of the twenty-seventh anniversary of the battle at Hampton Roads, the event with which the name of Ericsson will always be associated, and which has given to it a significance that will never be forgotten. His remains were first interred in New York, and then, in 1890, in accordance with the request of the Swedish Government, they were returned with impressive services to his native land, where they now rest. In his death he received his highest honors, for his remains were conveyed across the Atlantic by the U. S. S. "Baltimore," one of the new ships of the navy specially detailed for that service, and on both sides, in the United States and in Sweden, the event was marked with every honor and ceremony which could indicate the significance of his life and services for his adopted land and for the world at large.

The two pieces of work which perhaps will be most permanently linked with the name of Ericsson are the

screw-propeller as a means of marine propulsion, and the "Monitor" as a type of warship. In addition to these, however, his life-work was rich in results which bore direct relation to many other improvements in the broad field of marine engineering and naval architecture. Of these a few of the more important may be mentioned, such as the surface condenser, distiller, and evaporator, forced draft for combustion, placing machinery of warships below the water-line, and their protection by coal, ventilation by fan-blowers, together with a vast variety of items involved in the conception and design of the "Monitor" as a whole, and in his other naval designs.

In order to appreciate the influence of Ericsson's life and work on the field of marine construction, a brief glance may profitably be taken at this branch of engineering work as it was before Ericsson's time, and as it is now.

The material employed for shipbuilding was almost entirely wood. This was displaced in the 'sixties and 'seventies by iron, which in turn was displaced by steel, so that at the present time, except for special reason, no material other than steel is thought of for this purpose. With the gradual displacement of wood by iron in the mercantile marine, Ericsson's relation was only indirect. Some of the earlier mercantile vessels in which he was interested were of wood and some of iron. In the field of warship construction, however, his influence through

the "Monitor" was more direct, especially as to the value of metal armor as a protection against great gun-fire. Still, it is no more than justice to say that with the change from wood to iron which took place during the active part of his life, Ericsson had only an indirect relation, and the change would doubtless have come about at the same time, and in much the same general way as it did, independent of any influence which his work may have had upon the question. Turning to the means of propulsion, we find sails as the main, or almost only, reliance during the early years of the century. The steam-engine operating paddle-wheels had come to be recognized as a possibility, and under certain conditions as a commercial success. The screw-propeller as a means of propulsion was known only as a freak idea, and was without status or recognition as a commercial or practical means for propelling ships. So far as the screw-propeller was thought of as a means of propulsion, it lay under a suspicion of loss of efficiency due to the oblique nature of its action, and this was supposed to be such as to render it necessarily and essentially less efficient than the paddle-wheel.

Ericsson lived to see the use of sails almost entirely discarded for war purposes, and for mercantile purposes relegated to ships for special service and of continually decreasing importance. He lived to see the steam-engine take its place as the only means for supplying

the power required to propel warships, and attain a position of almost equal relative importance in the mercantile marine. He lived to see the paddle-wheel grow in importance and estimation as a means of propulsion only in turn to be supplanted by the screw-propeller, which gradually increased in engineering favor from the days of its obscure infancy until it became the only means employed for the propulsion of ships navigating the high seas, while it had become a most serious rival to the paddle-wheel even for the purposes of interior and shallow-water navigation, — long a field considered as peculiarly suited to the paddle-wheel and to the engines adapted to its operation.

Regarding the change from wind to steam for the motive-power of ships, Ericsson did his full share among the engineers of his day, but it would be unfair to many others to claim for him any exclusive or preponderating influence in this movement, and in such matters it is difficult to clearly define the services of any one man. The lines of progress, however, have been in accord with his studies, and his work has certainly had a most direct and powerful influence upon the movement. The most important points of contact between Ericsson's work and these advances were in connection with his introduction of the surface condenser, the use of artificial draft, devices for heating feed water, his studies in superheated steam and its use, and his work in connec-

tion with the development of the compound principle in steam-engines, his relation to the introduction of the screw-propeller, and to the use of twin screws at a later time. He also devised and adapted many new types of engines for marine purposes having respect to the geometrical character of the connections by means of which a reciprocating motion of the piston may be transformed into a rotary motion of the shaft. In particular, he was the first to introduce and show the advantages of engines directly connected to the propeller-shaft, instead of through the more indirect and clumsy modes which others had previously thought necessary.

Aside from his relation to the screw-propeller, perhaps no item of his work in connection with the steam-engine is of more importance than the surface condenser, with its variant forms in the distiller and evaporator. If Ericsson had done nothing else, his claims to recognition and remembrance as an engineer and benefactor might have been well founded on his work in this connection. As it is, the fact that he was so largely instrumental in their perfection and adaptation to marine uses is wellnigh forgotten in the brighter light of his other achievements.

Regarding Ericsson's relation to the successful introduction of the screw-propeller, little need be added to what has already been said. Whatever may be urged

regarding dates and patents or earlier years in which the screw-propeller was used, it is a fact that in 1833–35 it was not recognized as an accepted mode of propulsion. While known as a possibility, it had no standing in the engineering practice of the day. A few years later it was recognized as an accepted mode of propulsion and had gained a permanent and definite place in the practice of the day, — a place which has continued to grow in importance until its earlier rival, the paddle-wheel, is almost on the brink of relegation to museums of antiquities, except possibly for rare and special shallow-water uses. A careful and dispassionate study of the facts, so far as they can be known at the present time, seems to indicate clearly that of those who were concerned in successfully adapting the screw-propeller to the needs of marine propulsion and in laying the foundation for these changed conditions, especially in the United States, none was so prominent as Ericsson, or so fairly deserving of the chief credit; and with this judgment the mature thought of the present day seems to agree with little dissent.

Turning to a consideration from a similar point of view of Ericsson's services in connection with warship design and construction, note may be first taken of the condition of the art of naval warfare in the years 1840–50, or when Ericsson first began his labors in this field.

The material used was wood, the means of propulsion sails, with some thought of steam-engines and paddle-wheels; the means of offence were cast-iron guns large in number but small in size, the largest being 9 or 11 inches in diameter and throwing a shell of some 75 or 130 pounds weight, while the means of defence consisted solely in the "wooden walls," and modern ideas regarding armor had not even appeared above the horizon.

Ericsson's contributions to the art of naval warfare are embodied in the "Princeton," the "Monitor" and its class, and the "Destroyer." In the "Princeton" the material used was wood, and in the "Monitor" and "Destroyer" iron, following simply the developments of the age. In the three the means of propulsion was by screw-propeller. In the "Princeton" the means of offence were two 12-inch wrought-iron guns, as already noted. In the "Monitor" and its type the means of offence were two 11-inch smooth-bore cast-iron guns, followed later by larger guns of 13 and 15 inches of similar type. In the double-turreted monitors four such guns were of course installed. In the "Destroyer" the means of offence was a single gun for discharging a torpedo under water at the bow. On the "Princeton" the means of defence consisted still in wooden walls, while in the "Monitor" and its class the change was profound and complete. The essential idea

of the "Monitor" was low freeboard and thus small exposed surface to the ship herself, combined with the mounting of guns in circular revolving turrets, thus giving an all-around fire and on the whole making possible an adequate protection of the exposed parts of the ship and providing for the combination in maximum proportions of armored protection and heavy guns for offence. On the "Destroyer" the means of defence consisted simply in a light deflecting deck armor forward, the vessel being intended to fight bows on and depending on her means of offence rather than defence, which were made quite secondary in character.

The "Monitor," however, was Ericsson's great contribution to the art of naval war, and with it his name will always be associated. It broke with the past in every way. It reduced the number of guns from many to few, two or at most four; it reduced the freeboard from the lofty topsides of the old ship-of-the-line to an insignificant two or three feet, and thus made of the target a circular fort and a low-lying strip of armor. It placed the guns in this circular fort and covered it with armor thick enough to insure safety against any guns then afloat, and thus, as perfectly as the engineering means of the day would permit, insured the combination of offensive and defensive features in maximum degree. It cleared away at one stroke masts, sails, and all the lofty top-hamper which since time immemorial had

seemed as much an essential feature of the fighting ship as the guns themselves. It transformed the design of the fighting ship from the older ideals expressed in the American frigate "Constitution," or the English "Victory," to the simplest terms of offence, defence, and steam motive-power. It made of the man-of-war a machine rather than a ship, an engine of destruction to be operated by engineers rather than by officers of the ancient and traditional type. There is small wonder that in all quarters the idea of ships of this type was not received with enthusiasm. The break with the past was too definite and complete. The monitor type represented simply the solution of the problem of naval warfare worked out by a man untrammelled by the traditions of the past and determined only on reducing such a ship to the simplest terms of offence and defence as expressed by the engineering materials and possibilities of the day. Judged from this standpoint, the vessel seems beyond criticism. She filled perfectly the ideal set before himself by her designer, and represents as a complete and harmonious whole what must still be recognized as the most perfect solution of the problem in terms of the possibilities of those days.

It is proper here that due reference should be made to the claims in behalf of Mr. Theodore R. Timby as an inventor of the turret and of the monitor idea as expressed thereby. These claims and the main facts

in the case have long been known, and there should certainly be no attempt to take from any one his due share in the developments which gave to our nation a "Monitor" in her hour of need. It is well known that Mr. Timby between 1840 and 1850 conceived the idea of a revolving fort of iron mounted with numerous guns and intended to take the place of the masonry or earth-structures in common use for such purposes. He seems also to have conceived of a similar structure for use on a ship of low freeboard, and a model showing such a design was constructed. In 1843 he filed a caveat for the invention of the revolving turret. Here the matter apparently rested until 1862, and after the battle between the "Monitor" and "Merrimac," when he took out a patent which was dated July 8, 1862, covering "a revolving tower for defensive and offensive warfare, whether on land or water." Ericsson's associates in the business of building monitors for the Government acquired these patents of Timby, presumably as shrewd business men, in order to quiet any claim on his part, and to have the plan available for land forts, should the opportunity arise to push the business in this direction. There is no question but that Ericsson was antedated by Timby in the suggestion of a revolving turret, at least in so far as public notice is concerned. Ericsson frankly admitted this, and stated that he made no claim to absolute originality

in this respect. He further stated what is undoubtedly true, that the main idea in the turret, that of a circular revolving fort, antedates the Nineteenth Century as a whole, and its origin is lost in the uncertainties of early tradition. It is simply one of those early ideas which naturally must have been known in essence since time immemorial, and as such it was the common property of the engineering practice of the century. It belongs neither to Timby nor to Ericsson, and no claims regarding priority in this respect are worthy of serious consideration. The question is not who first conceived the idea of a revolving fort, but who designed and built the "Monitor" as she was, and as she met the "Merrimac" on the 9th of March, 1862. The answer to the latter is too well known a part of the history of the times to admit of question or to call for further notice. Ericsson's claim for recognition in this respect rests not on any priority of idea regarding the use of a circular fort, but rather upon the actual "Monitor" as she was built and as she crushed at one blow the sea-power of the South, and representing as it did a completely and carefully designed whole, dating back to the earlier dealings with Napoleon III. in 1854. This is an age which judges men by what they do, and judged by this standard Ericsson's claims in connection with the monitor type of warship are never likely to be seriously questioned.

Taking Ericsson's life and work, what portion remains as a permanent acquisition or as a part of the practice of the present age? This is a question which merits at least a moment's notice.

We should not make the mistake of thinking that permanency is necessarily a test of merit, or that the value of his services to the world should be judged by such parts of his work as are plainly apparent in the practice of the present day. A piece of work must be judged by the circumstances which brought it forth, and by the completeness and perfection of its adaptation to the needs and possibilities of its age.

We have then the steam fire-engine; compressed air which he early employed in England, and which has become an instrument of enormous importance in connection with the industrial progress of the age, although this is in no especial degree due to his efforts; the surface condenser, distiller, and evaporator are a permanently and absolutely essential part of modern marine practice; the screw-propeller has almost sole possession of the field of marine propulsion; modern marine engines and boilers in naval practice are always placed below the water-line and are protected by deflective deck armor and frequently by coal as well; the turret has become a permanent and accepted part of the practice of the age, while the monitor type in its essential feature seems to be evanescent.

The modern battleship is a vastly more complex structure, and represents more complex ideas and combinations than did Ericsson's "Monitor." It contains a battery of guns of the heaviest type known to naval ordnance. At present such guns are usually of 12-inch bore and throw a shell of about 800 pounds weight, with an initial velocity of nearly 3,000 feet per second. Then there is a supporting battery of guns, 6, 7, or 8 inches in diameter of bore, and finally a secondary battery of smaller quick-firing guns, throwing shells of from 1 pound to 20 or 30 pounds weight, and added to these there may be a torpedo outfit as well. The exigencies of fighting ships at sea and in all weathers seems to have pronounced against the monitor type with its low freeboard as unsuitable for use on the open sea, while the enormous advances in modern guns and armor have made a totally different problem of the distribution of means offensive and defensive. Again, the monitor type was never intended for long cruising, or indeed for other service than the defence of coasts and harbors. The policy of building a vessel thus adapted only to an inner line of defence, and not adapted to an outer line of defence and offence as well, has been further called in question, and the judgment of the present day has decided against such policy. It is true that in the so-called "new navy," begun in 1883, one monitor, the "Monterey," has been built,

while four others of older type have been somewhat modernized, and there are three monitors building at the present time. It may be doubted, however, if they will be followed by others, at least so long as the conditions of naval warfare and the spirit of public policy remain as they now are.

The monitor type was a perfect solution of the problem of its day, and nobly it answered the calls made on it. The problem has now changed, the conditions affecting its solution have also changed, and it is no discredit to the original type that it now seems to have had its day, and that it must give way to other forms more perfectly expressing the spirit of the present age, and the means available for the solution of present-day problems in the art of naval war.

In many ways, however, the influence of Ericsson's work still lives in the modern battleship, and while in our modern designs we have gotten far away from the essential features of the monitor type, yet it is not too much to say that the germ of the modern battleship is in many ways found in the "Monitor," especially as expressed in terms of concentration of heavy gun-fire and localized protection of gun positions; and in more ways than may be suspected, the influence of Ericsson and of his work had its part in the developments which have led to the splendid designs of the present day.

Returning again to our note of the dependence of

the present age on Ericsson, mention may be made of the blower for forcing the combustion in steam-boilers as a well-established feature of standard marine practice, and one absolutely essential to the development of the highest attainable speeds, such as are required in warships, and especially in those of the torpedo and modern "Destroyer" types. Likewise the use of the fan for ventilation, as used by him in his early practice, has become a necessity of modern conditions both on naval and passenger ships, for the health and comfort of both passengers and crew. His long series of experiments and his years of labor on air and other forms of "caloric" engine are only represented by the "Ericsson air-engine" now on the market, and having its fair share of service in locations where simplicity of operation and scarcity of water may naturally suggest its use.

Of his labors in connection with a solar engine, and with other questions which occupied much of the time of his closing years, we have but little direct result. Others are at work on the idea of the solar engine, and it may be that a practicable solution of the problem will be found.

Ericsson's lasting imprint on engineering practice, curious as it may seem, was made in his earlier and middle life, rather than in his later years, and we have even more in the way of permanent acquisition from

his earlier than from his middle years. This results from the fact that in middle life he was largely engaged on warship designs, admirably adapted to the needs of the time and to the possibilities of the age, but no longer suited to either, while in later life he no longer found it necessary to work at problems which would produce a direct financial return, and therefore interested himself in a variety of questions somewhat farther removed from the walks of every-day engineering practice than those with which he was occupied in earlier life.

In personality Ericsson possessed the most pronounced and self-centred characteristics. Professionally he felt that to him had been granted a larger measure of insight than to others into the mysteries of nature as expressed in the laws of mechanics, and he was therefore little disposed to listen to the advice or criticism of those about him. This was undoubtedly one of Ericsson's most pronounced professional faults. He did not realize that with all his insight into the laws of mechanics and all his capacity for applying these laws to the solution of the problems under consideration, he might well make some use of the work of his fellow-laborers in the same field. So little disposed was he to thus use the work of others that a given device or idea which had been in previous use was often rejected and search made for another, different and original, even

though it might involve only some relatively trivial part of the work. He was simply unwilling to follow in the lead of others. He must lead or have none of it, and thus the fact that a device or expedient was in common use would furnish an argument against rather than for its adoption. His natural mode of work was utterly to disregard precedent and to seek for fundamental solutions of his problems, having only in view the conditions to be fulfilled, the laws of mechanics, and the engineering materials of construction. This habit of independence and of seclusion within the narrow circle of his own work so grew upon him in later years that mechanical science made many advances of which he took little or no note, and of which he refused to avail himself, even though he might have done so greatly to his own advantage.

In his later years, in a letter to his friend Captain Adlersparre, he says: "Do not laugh at me now, Captain, when I say that nobody can mislead me. Do not condemn me if I at the same time confess that I am directed by nobody's judgment but my own, and that I never consult anybody and take nobody's advice." In all matters connected with his work his will was imperious, and he would brook no interference or criticism. His temper was high, his organization sensitive, and many times throughout his life, relations with his best friends became strained by his instability of temper or

impatience with what he might construe as a criticism regarding his work. With this instability of temper, however, was combined a deep-seated tenderness and kindness of heart, and he was as quick to forget the cause of offence as he was to manifest displeasure upon occasion.

Notwithstanding the asperities of Ericsson's character in regard to his professional work, and his entire lack of effort to make friends among the learned of his day, recognition and unsought honors came in upon him. He was elected to honorary membership in the societies of note in the United States and Sweden, and in addition to the thanks of Congress and of the Legislature of the State of New York, he received a resolution of thanks from the Swedish Riksdag, or Parliament, in 1865. In 1862 he was granted the rarely bestowed Rumford medal, and received at other times during his life medals, honors, and decorations such as have perhaps fallen to no other who has wrought in the same field of human effort. While recognition of this character pleased him greatly when it came spontaneously and willingly, he placed but little value on that which he thought grudgingly or tardily tendered, and in one or two instances refused membership in societies which he thought granted in that manner.

A large measure of this independence of character is necessary to the performance of the work which Erics-

son did. Had he been ever ready to listen to the views of others, and to modify his ideas in accordance with them, his greatest achievements would never have been accomplished. In Ericsson, however, this characteristic was carried to an undue extreme, and he might unquestionably have accomplished more had he been able to co-operate with others and to accept and use freely the best work of contemporaries in his own field.

Ericsson was essentially a designing rather than a constructing engineer. His genius lay in new adaptations of the principles of mechanics or in new combinations of the elements of engineering practice in such way as to further the purposes in view. His mode of expression was the drawing-board. While he wrote vigorously and well, and while he was a frequent contributor in later years to scientific literature, especially on the subject of solar physics, yet his best and natural mode of expression was the graphical representation of his designs on the drawing-board. Forms and combinations took shape in his brain and were transferred to the drawing with marvellous speed and skill. Those who have been associated with him bear testimony that the amount of his work was simply astounding, and that only by a combination of the most remarkable celerity and industry could they have been accomplished.

These drawings were furthermore so minute in detail

and so accurate in dimension that as a rule he did not find it necessary to give further attention to the matter after it had left his hands. Of the many parts of a complicated mechanism, one could be sent for construction to one shop and another elsewhere, all ultimately coming together and making a harmonious and perfectly fitting whole. In no other way could such astonishing speed in the detailed construction of the "Monitor" and other vessels of her type possibly have been made; and the fact that such speed in construction was obtained, and largely in this manner, is by no means the least impressive of the many evidences of Ericsson's genius as a designer.

The designs once completed on the drawing-board, however, Ericsson's interest in the work ceased in great measure, and as a rule he paid but little attention to constructive details, and took but slight interest in the completed whole. Thus he is said to have visited his "Destroyer" but once after she was built, and then simply in search of his assistant. He also declined an invitation from the Assistant Secretary of the Navy to visit Hampton Roads and inspect the "Monitor" immediately after her fight with the "Merrimac." He seemed to have no curiosity to inspect his work after it had left his hands, or to receive a report as to the practical working of his designs. This shows a peculiar lack of appreciation of the value of intimate

contact with constructive and operative engineering work. No one could hope to avoid errors, or to realize by drawing-board alone the best possible solution of engineering problems. Ericsson wilfully handicapped himself in this manner, and might unquestionably have more effectively improved and perfected his ideas had he been disposed to combine with his designs at the drawing-board practical contact with his work as constructed.

His work was all done in his office at his house. For the last twenty-five years of his life he lived at 36 Beach Street, New York, where he wrought every day in the year, and often until far into the night. His office contained, beside his drawing-table and other furniture, a long table, on which at times, when overcome by fatigue, he would stretch himself and take a short nap, using a dictionary or low wooden box for a pillow.

His relations with his native land were always close, and, as already hinted, he gave much of his best effort to the study of means for her defence. Toward his friends and relatives he was the embodiment of watchful care and generosity. His private benefactions were for his means large, and were given with a whole-hearted generosity which must have added much to the love and esteem in which the recipients regarded him. His public benefactions were also notable, and during the later years of his life he gave away regularly no incon-

siderable share of his income. Though gifted with reasonable prudence, he had no conception of the "business sense," and no capacity as a money-getter. After acquiring by his inventions and enterprise a modest competence, he devoted himself almost entirely to work less directly related to a financial return, and lived comfortably upon the principal which his earlier efforts had provided.

Ericsson had absolute faith in himself and in his mission to render available the energies of nature for the uses of humanity and civilization. His character was framed about the central idea of fidelity to this mission. He was dogmatic and optimistic as regards his own work; he had a contemptuous indifference to the work of others, and a disregard of the help which he might derive from a closer study of such work. He trained himself, body, mind, and affections, solely with reference to his mission, and allowed no interference with it. He was the embodiment of physical and mental vigor, prodigious industry, continuity of purpose, indomitable courage, capacity for great concentration of mind, and oblivion to all distracting surroundings. With such characteristics, combined with the rare endowment of mental capacity and insight regarding the principles of engineering science, small wonder is it that his life was one so rich in results. It could not have been otherwise, and the

results simply came as a consequence of the combination of the characteristics of the man and the surroundings in which he was placed.

The question as to how much more or how much better he might have done had he possessed more faith in the work of others and a willingness to be guided in some measure by their experience is of course idle. Ericsson was a combination of certain capacities and characteristics; a combination of other capacities and characteristics would not have been Ericsson, and any discussion of such a supposition is therefore aside from the purpose of this sketch.

John Ericsson lived in a period of rapid engineering development and change. Old ideals were passing away, and the heritage which the Nineteenth Century was able to pass on to the Twentieth was in preparation. In this preparation Ericsson bore a large and most important part. So long as ships traverse the seas, Ericsson's name will be remembered for his work in connection with the introduction of the screw-propeller. So long as the memory of naval warfare endures, Ericsson's name will be remembered for the part which he bore in the transition from wood to iron, from unarmored ships to turrets and armor, from scattered to concentrated energy of gun-fire, and for his general share in the developments which have led to the ideal of a battleship prevailing at the opening of

the Twentieth century. For these and for many other achievements he will be remembered, and his life and works should serve as a constant stimulus to those upon whom the engineering work of the present age has fallen, to see that with equal fidelity they live up to the possibilities of their endowments and opportunities, and serve with like fervency and zeal the needs of the age in which they are placed.

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LI HUNG CHANG

1823–1901.

THE FAR EAST.

LI HUNG CHANG.

THE FAR EAST.

By W. A. P. MARTIN, D.D., LL.D

INTRODUCTORY.

FIVE years ago Earl Li was at the head of the "Tsungli Yamen," or Foreign Office in Peking. The present writer, having known him long and intimately, called one morning to request a letter of recommendation to aid in raising money for an International Institute projected by the Rev. Dr. Reid. "He 's got one letter; why does he want another?" asked Li, in a tone of mingled surprise and irritation. "True," said I, "but that is from the Tsungli Yamen. Nobody in America knows anything about the Yamen. What he wants is a personal letter from you; because the only Chinese name besides Confucius that is known outside of China is Li Hung Chang."

"I'll give it! I'll give it!" he exclaimed, smiling from ear to ear at the thought of his world-wide reputation.

This was taking him on his weak side; but it was fact, not flattery.

Over forty years ago Li's rising star first came to view in connection with operations against the rebels in the vicinity of Shanghai, and from that day to this, every war, domestic or foreign, has served to raise it higher and make it shine the brighter. It reached its zenith in 1901, when after settling terms of peace with several foreign powers he passed off the stage at the ripe age of fourscore. What better type to set forth his age and nation than the man who, through a long career of unexampled activity, won for himself a triple crown of literary, military, and civil honors? In physique he was a noble specimen of his race, over six feet in height, and in his earlier years uncommonly handsome. The first half of his existence was passed in comparative obscurity at Hofei in Anhui, a region remote from contact with foreign nations.

It was there his character was formed, on native models; there he carried off the higher prizes of the literary arena; and there he became fitted for the rôle of China's typical statesman.

His career in outline may be stated in a few words. His native province being overrun by rebels, he passed from the school-room to the camp, and got his earliest lessons in the military art under the leadership of the eminent viceroy Tseng Ko Fan. The

neighboring province of Kiangsu falling into the hands of rebel hordes a few years later, he won renown by recapturing its principal cities, by the aid of such men as the American Ward and the English Gordon. His success as a general made him governor of Kiangsu, and his success as governor raised him to the rank of viceroy, holding for many years a post at one or other of the foci of foreign trade north or south.

Beyond the borders of China he was twice sent on special embassies, and once he made the tour of the globe; but his most brilliant achievement was in twice making peace on honorable terms, when his country was lying prostrate before a victorious enemy.

It remains to expand this incomparable catalogue; but to make intelligible that remarkable series of events in which he bore such a conspicuous part, we must first invite our readers to accompany us in a historical retrospect in which we shall point out the opening and growth of foreign intercourse.

I.

INTERCOURSE WITH CHINA BY LAND.

Of the nature of that intercourse in its earlier period, there exists a monument that speaks volumes. That is no other than the Great Wall; which, hugest of the works of man, stretches along the northern frontier of China proper for one thousand five hundred miles from

the sea to the desert of Gobi. Erected 255 B. C. it shows that even at that early date the enemies most dreaded by the Chinese were on the north. Yet how signally it failed to effect its purpose! For since that epoch the provinces of Northern China have passed no fewer than seven centuries under Tartar sway. Two Tartar dynasties have succeeded in subjugating the whole empire, and they have transmitted beyond the seas a reputation which quite eclipses the fame of China's ancient sovereigns.

In fact, that which first made China known to the western world was its conquest by the Mongols in the thirteenth century. Barbarous nomads, with longing eyes forever directed to the sunny plains of the south, they also conquered India, bringing under their sceptre the two richest regions of the globe. Of Genghis and Kubla, it may be asserted that they realized a more extended dominion than Alexander, Cæsar, or Napoleon ever dreamed of. But

> "Extended empire, like expanded gold,
> Exchanges solid strength for feeble splendor."

Their tenure of China was of short duration, — less than a century. In India, however, their successors, the great Moguls, continued to maintain a semblance of sovereignty even down to our own times, when they were wiped from the blackboard for having taken part in the Sepoy mutiny.

Liberal beyond precedent, Kubla Khan encouraged the establishment of a Christian bishopric, in which John de Monte Corvino was the first representative of the Holy See. He also welcomed those adventurous Italians, the Polos, and sought to make use of them to open communication with Europe. Yet we cannot forbear to express a doubt, whether, aside from the Christian religion, Europe in that age had much in the way of civilization to impart to China.

Three of the native dynasties, which preceded the Mongol conquest, made themselves famous by advancing the interests of civilization. The house of Han (B. C. 202–A. D. 221) restored the sacred books, which the builder of the Great Wall had destroyed in order to obliterate all traces of feudalism and make the people submit to a centralized government. Even down to the present day, the Chinese are proud to describe themselves as "sons of Han." The house of Tang, A. D. 618–908, is noted above all for the literary style of its prose-writers and the genius of its poets. In South China the people are fond of calling themselves "sons of Tang." The house of Sung, A. D. 970–1127, shows a galaxy of philosophers and scholars, whose expositions and speculations are accepted as the standard of orthodoxy. More acute reasoners it would be difficult to find in any country; and in the line of erudition they have never been surpassed.

It is reported that in 643 the Emperor Theodosius sent an envoy to China with presents of rubies and emeralds. Nestorian missionaries also presented themselves at court. The Emperor received them with respect, heard them recite the articles of their creed, and ordered a temple to be erected for them at his capital. This was in the palmy period of the Tangs, when the frontiers of the Empire had been pushed to the borders of the Caspian Sea.

If China in part or in whole was sometimes conquered by Tartars, it is only fair to state that the greatest of the native sovereigns more than once reduced the extra-mural Tartars to subjection. Between the two races there existed an almost unceasing conflict, which had the effect of civilizing the one and of preventing the other from lapsing into lethargy.

About B. C. 100, Su Wu, one of China's famous diplomatists, was sent on an embassy to the Grand Khan of Tartary. An ode, which he addressed to his wife on the eve of his perilous expedition, speaks alike for the domestic affections of the Chinese and for their ancient literary culture.

"Twin trees whose boughs together twine,
Two birds that guard one nest,
We'll soon be far asunder torn
As sunrise from the west.

"Hearts knit in childhood's innocence,
Long bound in Hymen's ties,

One goes to distant battlefields,
One sits at home and sighs.

"Like carrier dove, though seas divide,
I'll seek my lonely mate;
But if afar I find a grave,
You 'll mourn my hapless fate.

"To us the future 's all unknown;
In memory seek relief.
Come, touch the chords you know so well,
And let them soothe our grief."

II.

INTERCOURSE BY SEA.

In 1388 the Mongols were expelled. The Christian bishopric was swept away, and left no trace; but a book of the younger Polo, describing the wealth of China, gave rise to marvellous results. Together with the magnetic needle, which originated in China, it led to centuries of effort to open a way by sea to that far-off fairyland. It was from Marco Polo that Columbus derived his inspiration to seek a short road to the far East by steering to the West, — finding a new world athwart his pathway. It was the same needle, if not the same book, that impelled Vasco da Gama to push his way across the Indian Ocean, after the Cape of Good Hope had been doubled by Bartholomew Diaz. A century later the same book led Henry Hudson to search

for some inlet or strait that might open a way to China, when, instead of it, he discovered the port of New York.

The mariner's compass, which wrought this revolution on the map of the world, is only one of many discoveries made by the ancient Chinese, which, unfruitful in their native land, have, after a change of climate, transformed the face of the globe.

The polarity of the loadstone was observed in China over a thousand years before the Christian era. One of their emperors, it is said, provided certain foreign ambassadors with "south-pointing chariots," so that they might not go astray on their way home. To this day the magnetic needle in China continues to be called by a name which means that it points to the south. It heads a long list of contraries in the notions of the Chinese as compared with our own, such, for example, as beginning to read at the back of a book; placing the seat of honor on the left hand; keeping to the left in passing on the street, with many others, so numerous as to suggest that the same law that placed their feet opposite to ours must have turned their heads the other way. To the Chinese the "south-pointing needle" continued to be a mere plaything to be seen every day in the sedan chair of a mandarin, or in wheeled vehicles. If employed on the water, it was only used in coasting voyages.

So with gunpowder, of which the Arabs were trans-

mitters, not inventors. In other lands it revolutionized the art of war, clothing their people with irresistible might, while in its native home it remained undeveloped and served chiefly for fireworks. Have we not seen, even in this our day, the rank and file of the Chinese army equipped with bows and arrows? The few who were provided with firearms, for want of gunlocks, had to set them off by a slow-match of burning tow; and cannon, meant to guard the mouth of the Peiho, were trained on the channel and fixed on immovable frames.

The art of printing was known in China five centuries before it made its way to Europe. The Confucian classics having been engraved on stone to secure them from being again burned up, as they had been by the builder of the great wall, the rubbings taken from those stones were printing. It required nothing but the substitution of wood for stone and of *relievo* for *intaglio* to give that art the form it now has. The smallest scrap of printed paper in the lining of a tea chest, or wrapped about a roll of silk, would suffice to suggest the whole art to a mind like that of Gutenberg. In China it never emerged from the state of wood engraving. The "Peking Gazette," the oldest newspaper in the world, is printed on divisible types, but they are of wood, not metal, more than one attempt to introduce metallic types having proved unsuccessful, for the want of that happy alloy known as type-metal. It is from us

that they have learned the art of casting type, especially that splendid achievement, the making of stereotype plates, and, later, electrotype plates, by the aid of electricity and acid solutions. Chemistry, from which this beautiful art takes its rise, carries us back to China, for it was there that alchemy had its birth, as I have elsewhere shown.[1]

Man's first desire is long life; his second, to be rich. The Taoist philosophy commenced with the former before the Christian era, but it was not long in finding its way to the latter. A powerful impulse was thus given to research in the three departments of science,—chemistry, botany, and geography. As in the case of gunpowder, the Arabs transmitted these discoveries to the West, and along with them the Chinese doctrine as to the twofold objects of alchemic studies,—the elixir of life and the philosopher's stone.

From this double root sprang the chemistry of the West, which in no mean sense has fulfilled its promise by prolonging life and enriching mankind. In all these the West has performed the part of a nursing mother, but she has brought the nursling back full grown, and prepared to repay its obligation to its true parent by effective service.

Portuguese merchants made their way to Canton early in the sixteenth century, but it was not till the latter

[1] "The Lore of Cathay." New York: Fleming H. Revell Co., p. 44.

part of the century that Catholic missionaries entered on their grand crusade. In 1601 the Jesuit pioneer Matteo Ricci and his associates, impelled by religion and armed with science, presented themselves at the court of Peking. The Chinese had been able to reckon the length of the year with remarkable accuracy two thousand years before the time of Christ, but their science had made no headway. The missionaries found their calendar in a state of confusion, vanquished the native astronomers in fair competition, and were formally installed as keepers of the Imperial Observatory; and these missionaries supervised the casting of the bronze instruments which have since been taken to Berlin.

This honor they retained even after the fall of the native dynasty that patronized them. When the Manchus effected their conquest in 1644, not only were the Jesuit missionaries left in charge of the observatory, but the heir apparent was placed under their instruction. Coming to the throne in 1662, under the now illustrious title of *Kanghi*, the young prince showed himself a generous patron as he had previously been a respectful pupil. He was apparently not averse to the idea of his people's adopting Christianity as their national religion, and allowed the missionaries a free hand to plant churches throughout the vast interior. Rarely if ever has so fine an opportunity offered for

making an easy conquest of a pagan empire. It was lost through the jealousy of contending societies, and especially through an unfortunate error of the Pope. The Dominicans denounced the Jesuits for tolerating the practice of pagan rites, such as the worship of ancestors, and for employing for God the name of a pagan deity. The name which they then objected to was Shang-ti, Supreme Ruler, a venerable designation for the Supreme Power found in the earliest of the Chinese canonical books, and at this day accepted by a large proportion of Protestant missionaries.

The question as to its fitness was referred to the Emperor, who decided in favor of the Jesuits. It was then brought before the Papal See, condemned as idolatrous, and Tien Chu, the Lord of Heaven, adopted in its stead. That Shang-ti, however pure in origin, had come to be applied to a whole class of deities was perfectly true, but the name proposed in its stead was not free from a taint of idolatry,—Tien Chu, Lord of Heaven, being one of eight divinities, and worshipped along with Ti Chu, Lord of Earth, Hai Chu, Lord of the Sea, etc.

The manner in which his opinions had been set aside by the Pope had no doubt a repelling influence on the mind of the Emperor, so that if he had ever felt inclined to embrace Christianity, he drew back in his later years. Not only so, but he left behind him a series of Maxims

in which he censures the foreign creed and warns his people against it. These Maxims were ordered to be read in public by mandarins, and they continue to be recited and expounded as a sort of religious ritual. Is it surprising that this lost opportunity was followed by a century and a half of open persecution? That most of the churches survived, not only attests the zeal with which the Faith had been propagated, it throws a pleasing light on the force of the Chinese character. At the dawn of our new epoch, there were still some half a million converts,— with here and there a foreign Father hiding in their midst.

In bringing about this change of policy there was indeed another influence at work. Had not the Emperor of China heard some rumors of what was going on in the dominion of his cousin, the Great Mogul — how the French were dispossessing the Portuguese; and how the English later on succeeded in expelling the French? How could they doubt that a large community of native Christians would act as an auxiliary to any foreign invader? A suspicion of this kind had in fact sprung up under the preceding dynasty. In consequence of it not a single seaport except Macao was opened to foreign trade; and when foreigners went to Canton, they were lodged in a suburb and not allowed to penetrate within the walls of the provincial capital. Such misgivings as to the designs of foreigners we find strikingly expressed

in a book of that period called "Strange Stories of an Idle Student."

One story is as follows: When Red-Haired Barbarians first appeared on our coast they were not allowed to come ashore. They begged, however, to be permitted to spread a carpet on which to dry their goods, and this being granted, they took the carpet by its corners and stretched it so that it covered several acres. On this, they debarked in great force and, drawing their swords took possession of the surrounding country.

III.

THE OPIUM WAR.

THE first great event that woke China from her dream of solitary grandeur was the war with England, which broke out in 1839 and was closed three years later by the Treaty of Nanking. It was not, however, all that was needed to effect that object. It made the giant rub her eyes and give a reluctant assent to terms imposed by superior force. But many a rude lesson was still required before she came to perceive her true position, as on the lower side of an inclined plane. To bring her to this discovery four more foreign wars were to follow before the end of the century, culminating in a siege in Peking and massacres throughout the northern provinces which may be looked on as the fifth act in a long and bloody tragedy.

In the last three wars Li Hung Chang was a prominent actor. In the first two he took no part. Yet was it the shock which they gave to the empire that drove him from a life of literary seclusion to do battle in a more public arena.

The Opium War of 1839 is not improperly so designated, but nothing is more erroneous than to infer that it was waged by England for the purpose of forcing the product of her Indian poppy fields on the markets of China. Opium was the occasion, not the cause. The cause, if we are to put it in a single word, was the overbearing arrogance of an Oriental despotism, which refused to recognize any equal in the family of nations.

In the Straits settlements and in the seaports of India, Chinese merchants had been brought under sway of the bewitching narcotic. It found its way to their southern seaports, and without being recognized as an article of commerce, the trade expanded with startling rapidity. The Emperor, Tao Kwang, one of the most humane of rulers, resolved to take measures for the suppression of the vice. He had come to the throne in 1820; and there is a story that he was moved to action by the untimely fate of his eldest son, who had fallen a victim to the seductive poison.

Commissioner Lin, whom he selected to carry out his prohibitory policy, was a fit instrument for such a mas-

ter, equally virtuous in his aims and equally tyrannical in his mode of proceeding. Arriving at Canton, his first object was to get possession of the forbidden drug, which was stored on ships outside the harbor. This he thought to accomplish by surrounding the whole foreign community by soldiers and threatening them with death if the opium was not promptly surrendered. While its owners or their agents hesitated, Captain Elliot, the British Superintendent of Trade, came up from Macao, and demanded to share the duress of his nationals. He then called on them to deliver up the drug to him to be used in the service of the Queen for the ransom of the lives of her subjects, assuring them that they would be reimbursed from the public treasury. No fewer than twenty-one thousand chests, valued at nine million dollars, were brought in from the opium ships and formally handed over to Commissioner Lin. The foreign community was set free, and the drug destroyed by being mixed with quicklime.

War was made to punish this outrage on the rights of the foreign community, and to exact indemnity for the seizure of their property. Canton was not captured, but held to ransom, and the haughty Viceroy sent into exile. Other cities were taken and held; and, in 1842, a treaty of peace was signed at Nanking by which five ports were opened to foreign trade. The embargo on opium was not withdrawn; but the defeat of the Chi-

nese resulted in a virtual immunity from seizure together with a growth of the traffic, such as to justify the ill-odored name which that war still bears in history.

Treaties with other powers followed in quick succession. On demand of the French Minister, the Emperor recalled his prohibitory decrees against Christianity and issued an Edict of Toleration. If the opening of the ports gave a stimulus to trade, the decree of toleration opened a door for missionary enterprise. As yet, however, neither merchant nor missionary was allowed to penetrate into the interior; while the capital and the whole of the northern seacoast remained inaccessible. This was obviously a state of things that could not be permanent; yet fifteen years were to pass before another war came to settle the terms of intercourse on a broader basis.

When the war broke out, Li Hung Chang was seventeen years of age, living at Hofei in Anhui. As there were then no newspapers in China it may be doubted whether he heard of it until a British squadron sailed up to Nanking and extorted a treaty at the cannon's mouth. Li was rudely startled by the appearance of a new force, to which there was no allusion in any of his ancient books. Along with the sailing-ships there were two or three small steamers. It struck the Chinese with astonishment to see them make head against

wind and tide. *Shin Chuan*, "ships of the gods," is the name they gave those mysterious vessels. Little could Li foresee the part he was destined to take in creating a steam navy for China.

Descended from a long line of scholars, he was supposed to be born to the pursuit of letters. He did, in fact, devote himself to study with unflagging zeal, because he had as yet no temptation to turn aside. Was there not, moreover, an open door before his face inviting him to win for himself the honors of a mandarinate? In his native town he placed his foot on the first step of the ladder by gaining the degree of A. B., or, in Chinese, "Budding Genius." At the provincial capital he next carried off the laurel of the second degree, which is worth more than our A. M., not merely because it is not conferred in course, but because it falls to the lot of only one in a hundred among some thousands of competitors. These provincial tournaments occur but once in three years; and the successful candidates proceed to Peking to compete for the third degree, or D. C. L.,— *Tsin-shi*, or, "Fit for Office." Here the chances amount to three per cent.

Li's fortunes were again propitious, and in company with two or three hundred new-made doctors, he was summoned to the palace to contend in presence of the emperor for the honor of a seat in the Imperial Academy,—the Hanlin, or "Forest of Pencils." Here also he

met with success, but he was not among the first three whose names are marked by the vermilion pen of majesty, each of whom sheds lustre on his native province. The highest of the three is called Chuang Yuen, "Head of the List," or "Prince of Letters." In the 'fifties it fell to a native of Ningpo, where I then lived. His good luck was announced to his wife by the magistrate in person, who conducted her to the six gates, at each of which she scattered a handful of rice, as an omen of good fortune. In the 'sixties, when I had removed to Peking, this honor was for the first time conferred on a Manchu, a son of the General Saishanga. His daughter was deemed a fit consort for the heir to the throne, wearing for a short time the tiara of empress, and committing suicide on the death of her lord.

In the two previous contests, handwriting goes for nothing, but in this it is not without weight, as the avowed object is to select scribes for the service of the throne. On those occasions extent of erudition and originality of thought are the qualities most esteemed; but this time the order of merit is decided by superficial elegance of style, and by facility in the composition of verse.

However defective the standard of learning, this long course of competition, extending over ten or fifteen years, has the effect of bringing before the throne a body of men each of whom is the survivor of a hundred

contests. No country can boast a better system for the selection of talent, and the government guards it with jealous care. I have known more than one examiner put to death for tampering with this ballot-box of the Empire. For ages it has provided the state with able officers; nor is its least merit that of converting a dangerous demagogue into a quiet student.

While waiting for an appointment, Li heard with dismay that Nanking had been taken by a body of rebels, and that his native province was in danger of being overrun by them. A new career opened before him, — one that led more directly to the highest offices within the gift of the sovereign. Asking a commission in the army, he was assigned to a position on the staff of Tsengkofan, father of the Marquis Tseng, who was afterwards Minister to England.

This rebellion, among the strangest of strange things, now claims our attention.

IV.

THE TAIPING REBELLION.

In April, 1853, the news reached us that Nanking had fallen into the hands of a body of rebels who, by a curious irony, called themselves Taipings, "Soldiers of Peace."

They were Chinese, not Manchus, and their leaders were all from the extreme south. Starting near Canton,

they had proclaimed as their object the expulsion of the Tartars. Overrunning Kwangsi and Hunan, they had got possession of Hankow and the two adjacent cities,—a centre of wealth which may be compared to the three cities that form our Greater New York. Everywhere they put to flight the government forces; but they did not choose to stop anywhere short of the ancient capital of the Mings. Seizing some thousands of junks, they filled them with the plunder of that rich mart, and sweeping down the river, carried by assault every city on its banks until they reached Nanking. Its resistance was quickly overcome; and putting to death the entire garrison of twenty-five thousand Manchus, they announced their intention to make it the capital of their empire, as Hung Wu had done when he drove out the Mongols and restored freedom to the Chinese race.

In a few months they despatched an expedition to expel the Manchus from Peking. But that proved a more difficult task than they expected. Before the detachment had arrived at Tientsin, it was met on the Grand Canal by a strong force under Sengkolinsin, the Mongol prince. Obliged to winter on the way, it was divided and cut off in detail; this defeat making it evident to all the world that the Manchu domination might still hope for a considerable lease of life. The blood and rapine which everywhere marked their pathway alienated the sympathy of foreigners from the Sol-

diers of Peace. Nor did the new power at Nanking manifest the least anxiety to obtain foreign aid, feeling assured of ultimate triumph. Yet, indifferent as they were to the co-operation of foreigners, the Taipings proclaimed themselves Christians, and appeared to aim their blows no less at lifeless idols than at living enemies. Shangti, the Supreme Ruler, the God of the ancient sages, was the object of their worship. They found his name in the Christian Bibles, and they published the Bible as the source of their new faith. Their faith amounted to a frenzy, giving them courage in battle, but not imparting the self-control essential to Christian morality. Filling their coffers with spoil, they stocked their harems with the wives and daughters of their enemies. If their lives had been more decent, they might have had a better chance to secure the favor of those powerful nations which had now become the arbiters of destiny in China.

The leader of the movement was a Cantonese by the name of Hung Siu Chuen. A copy of the Bible having fallen into his hands, he applied to a Baptist missionary for instruction. How much he learned may be inferred from the fact that he gave his followers a new form of baptism, requiring them to wash the bosom as a sign for cleansing the heart. He had ecstatic visions, and preached a crusade against idolatry and the Manchus. The ease with which the Manchus had been beaten by

the British in 1842 had revealed their weakness, and the new faith supplied the rebels with a fresh source of power. They mixed the teachings of the Gospel with new revelations as freely as Mohammed did in propagating the religion of the Koran. The chief called himself the younger brother of Jesus Christ. His prime minister assumed the title of the Holy Ghost; and his counsels were given out as decrees from Heaven. All this had an air of blasphemy that shocked the sensibilities of foreigners, and compelled them to stand aloof or to support the Manchus.

The native authorities were permitted to engage foreign ships and seamen to operate against the rebels, who sustained a siege in Nanking almost as long as the siege of Troy. From Shanghai, Suchau, and other cities the Taipings were driven out by the aid of foreigners, chiefly led by Ward and Gordon, the former an American, the latter a Briton. General Ward was never under the command of Li Hung Chang; but to him more than to any other foreigner belongs the honor of turning the tide of the Taiping Rebellion. A soldier of fortune, he offered to throw his sword into the government scale if it were paid for with many times its weight in gold. Gathering a nondescript force of various nationalities, he recaptured the city of Sungkiang, and followed this up by such a series of successes that his little troop came to be known as the "Ever-victorious Army." Falling

before the walls of Tseki, he was interred with pomp at the scene of his first victory, where a temple was erected to his memory, and he is now reckoned among the "Joss" of the Chinese Empire. His force was taken into Li's pay.

General Gordon (the same who fell at Khartoum) acted under the direction of Li Hung Chang; and his chief exploit was the recovery of Suchau. Unable to resist his artillery, the rebel chiefs offered to capitulate. They were assured by him that their lives would be spared. To this Li Hung Chang consented, and the stronghold was at once surrendered. Regardless of his plighted faith, Li caused the five leaders to be beheaded, an act of treachery which filled Gordon with such fury that he went from camp to camp, looking for Li, determined to put a bullet in his head. Li, however, avoided a meeting until Gordon's wrath had time to subside, and that treacherous act laid the foundation of his future fortunes. He was made governor of the province, and for forty years he rose in power and influence.

Not only was this terrible rebellion which laid waste the fairest provinces a sequel to the first war with England, it was prolonged and aggravated by a second war which broke out in 1857. In 1863, the last stronghold of the rebels was recaptured, and the rebellion finally suppressed, after twelve years of dismal carnage. In bringing about this result, no names are more con-

spicuous than those of Li Hung Chang and General Gordon, whose sobriquet of "Chinese Gordon" ever afterwards characterized him. Li's good fortune served him well in this war. Having won the favor of the Court, he was in command of the forces of eastern Kiangsu, and all the brilliant successes of Ward and Gordon were credited to him. He was not only made governor of the province, but also created an Earl in perpetuity.

V.

THE "ARROW" WAR; THE TREATIES.

NEVER did a smaller spark ignite a greater conflagration. In 1856 a native junk named the "Arrow," sailing under a British flag, was seized for piracy, her flag hauled down and her crew thrown into prison at Canton. On demand of Sir John Bowring, Governor of Hong Kong, they were handed over to Consul Parkes (later Sir Harry); but he refused to receive them because they were not accompanied by a suitable apology. The haughty Viceroy Yeh put them all to death, provoking reprisals on the part of the British, resulting in the occupation of Canton and the capture of Peking after three campaigns to the north.

In this war England had France for ally; as the two powers had been associated in that hugest of blunders, the Crimean War. Nor was the alliance a less blunder

on this occasion. Napoleon's excuse for participation was the murder of a missionary in Kwangsi; but his real motive was a desire to checkmate Great Britain, and prevent the conquest of new territory. In the Opium War she had stopped at Nanking, leaving the pride of China unhumbled, and the state of relations so unstable that another war was required to place them on a better footing. England, with unselfish generosity, invited the co-operation of Russia and the United States. Either power might have found as good a pretext for hostile action as that of France; but they chose to maintain an attitude of neutrality, offering only such moral support as might enable them to gather up the apples after the others had shaken the tree. In 1857 Canton was taken and held by the allies. The next spring the envoys of the four powers, each with a considerable naval force, proceeded to the mouth of the Peiho, the gateway to a capital as secluded and exclusive as that of the Grand Lama. The forts made a show of resistance, but they were put to silence in less than half an hour; and negotiations which had been opened by the neutrals were resumed at Tientsin.

Dr. S. Wells Williams was Chinese secretary to the United States minister, Mr. William B. Reed; and I acted as interpreter for the spoken language. An article in favor of Christian missions occasioned some delay; and Mr. Reed, who was vain and shallow, said to us,

"Now, gentlemen, hurry up with your missionary article for I intend to sign my treaty on the 18th of June [Waterloo day] with or without that clause." Fancy a mind that could think of a treaty obtained by British guns as entitling him to be associated with Wellington! Yet Mr. Reed had the effrontery to say that he "expected us to make the missionary societies duly sensible of their obligations" to him. That twenty-ninth article was the gem of the treaty; and it had the honor of being copied into that of Lord Elgin, which was signed eight days later.

High-minded, philanthropic, and upright, Lord Elgin made a mistake which led to a renewal of the war. He refused to place Tientsin on the list of open ports, because, as he said, "Foreign powers would make use of it to overawe the Chinese capital," — just as if overawing was not a matter of prime necessity. He hastened away to India to aid in suppressing the Sepoy mutiny, eventually becoming viceroy after another campaign in China. His brother, Sir F. Bruce, succeeded him as minister in China; and twelve months later (July, 1859) the ministers of the four powers were again at the mouth of the Peiho on their way to Peking for the exchange of ratified copies of the several treaties. The United States minister was John E. Ward, a noble-hearted son of Georgia, and the chief of our little squadron was the gallant old Commodore Tatnall.

We were not a little surprised to see the demolished forts completely rebuilt, and frowning defiance. We were told by officers who came down to the shore that no vessel would be allowed to pass; but that the way to Peking was open to us *via* Peitang, a small port to the north.

To this Mr. Ward made no objection, but the British, who had so recently held the keys of the capital, were indignant to be met by such a rebuff. They steamed ahead between the forts, leaving the Chinese to take the consequences. All at once the long line of batteries opened fire. One or two gunboats were sunk; two or three were stranded. A storming party was repulsed, and Admiral Hope, who was dangerously wounded, begged our American commodore to give him a lift by towing up a flotilla of barges filled with a reserve force. "Blood is thicker than water," exclaimed Tatnall, in tones that have echoed round the globe, and Ward making no objection, he threw neutrality to the winds, and proceeded to tow up the barges. Our little steamer was commanded by Lieutenant Barker, now Admiral Barker of the New York Navy Yard.

Even this failed to retrieve the day, the tide having fallen too low for a successful landing. For the British admiral nothing remained but to withdraw his shattered forces, and prepare for another campaign. For the United States minister a dazzling prospect now

presented itself, — that of intervening to prevent the renewal of war. From Peitang we proceeded by land two days. Then we continued our voyage for five days by boat on the Upper Peiho.

At Peking, calling on the genial old Kweiliang, who had signed the treaty in 1858, Mr. Ward was astonished at his change of tone. "You wish to see the Emperor. That goes as a matter of course; but his Majesty knows you helped the British, and he requires that you go on your knees before the throne in token of repentance." "Tell him," said Mr. Ward to me, "that I go on my knees only to God and woman." "Is not the Emperor the same as God?" replied the old courtier, taking no notice of a tribute to woman that was unintelligible to an Oriental mind. "You need not really touch the ground with your knees," he continued; "but merely make a show of kneeling. There will be eunuchs at hand to lift you up, saying 'Don't kneel. Don't kneel!'" The eunuchs, as Mr. Ward well knew, would be more likely to push us to our knees than to lift us up; and he wisely decided to decline the honor of an audience on such terms.

Displeased by his obstinacy, the Emperor ordered him to quit the capital without delay, and exchange ratifications at the sea-coast. A report was long current in Peking that foreigners have no joints in their knees; hence their reluctance to kneel. Thus vanished

for Mr. Ward the alluring prospect of winning for himself and his country the beatitude of the peacemaker.

The summer of 1860 saw the Peiho forts taken, and an allied force of thirty thousand men advancing on Peking. The court fled to Tartary, and the summer palace was laid in ashes to punish the violation of a flag of truce, the bearers of which were bound hand and foot, and left to perish within its walls. For three days the smoke of its burning, carried by a northwest wind, hung like a pall over the devoted city, whose inhabitants were so terrified that they opened the gates half an hour before the time set for bombardment. No soldiers were admitted, but the demands of the Allies were all acceded to, and supplementary treaties signed within the walls by Lord Elgin and Baron Gros. Peking was opened to foreign residence. The French succeeded in opening the whole country to the labors of missionaries. Legations were established at the capital, and a new era of peace and prosperity dawned on the distracted empire.

VI.

THE WAR WITH FRANCE.

If the opening of Peking required a prolonged struggle, it was followed by a quarter-century of pacific intercourse. China had at her helm a number of wise

statesmen, — such as Prince Kung and Wensiang. The Inspectorate of Customs begun under Mr. Lay took shape under the skilful management of Sir Robert Hart, and from that day to this it has proved to be a fruitful nursery of reforms, political and social.

Not only were students sent abroad for education at the instance and under the leadership of Yung Wing, but a school for interpreters was opened in the capital, which, through the influence of Sir Robert Hart, was expanded into the well-known Imperial College. On his nomination the present writer was called to the head of it, and Wensiang proposed to convert it into a great national university by making it obligatory on the members of the Hanlin Academy, the Emperor's "Forest of Pencils," to come there for a course of instruction in science and international law. Against this daring innovation, Wojin, a Manchu tutor of the Emperor, protested, declaring that it would be humiliating to China to have her choicest scholars sit at the feet of foreign professors. The scheme fell through, but before many years the Emperor himself had taken up the study of the English language, and two of our students were selected to be his instructors. One of them is at this present time (1902) Chinese minister at the Court of St. James. Several of our students have had diplomatic missions, and one, after serving as minister abroad, is now a leading member of the Board

of Foreign Affairs in Peking. A press opened in connection with the college printed numerous text-books on international law, political economy, physics, and mathematics, translated by the president, professors, and students.

America was fortunate in the choice of the first minister whom she sent to reside at Peking. This was Anson Burlingame, who, after doing much to encourage the Chinese in the direction of progress, was by them made the head of the first embassy which they sent to foreign nations. His success in other countries was largely due to the sympathy with which he had been received in the United States by Secretary Seward, and to the advice and recommendations with which he was provided by that great statesman. So deep an interest did Mr. Seward take in China that he went in person to study its condition before the close of his career. In his visit to Peking he was accompanied by his nephew, George F. Seward, who was United States Consul at Shanghai. The latter has since that date worthily represented our country as minister at Peking; but it may be doubted whether in that high position he ever performed an international service equal in importance to one performed during his consulship, for which he has recently received the cross of the Legion of Honor. In laying out their new concession at Shanghai, the French had excited the hostility of the people by dig-

ging up and levelling down many of those graves that occupied so much space outside of the city walls, and where the Chinese who worshipped their ancestors were to be seen every day burning paper and heaping up the earth. A furious mob fell on the French police, chased them from the field, and menaced the French settlement with knife and firebrand. The consuls were appealed to for aid, but no one responded except Mr. Seward, who headed a strong force from one of our men-of-war, dispersed the mob, and secured the safety of the foreign settlement. But for his timely intervention who knows that the French consulate would not have been reduced to ashes? If the consulate had been burned down, a war would have been inevitable, with a chain of consequences that baffles the imagination.

In 1871 a horrid atrocity was perpetrated by Chinese at Tientsin which certainly would have led to war with France if Napoleon III. had not at that very time been engaged in mortal combat with Germany. The populace were made to believe that the sisters at the French hospital had been seen extracting the eyeballs from their patients to use in the manufacture of magical drugs. They were set upon by a maddened multitude, a score or more of them slaughtered, and the buildings where they had cared for the sick and suffering turned to a heap of ruins. Count Roches-

chouart, instead of reserving the case to be settled at a later day, thought best to accept from the Chinese government an apology, with an ample sum in the way of pecuniary compensation. That grewsome superstition has led to bloodshed in more than one part of China.

In the summer of 1885 I was called one day from the Western Hills to the Tsungli-Yamen, or Foreign Office, on business of great urgency. On arriving, I was informed that the Chinese gunboats in the river Min had been sunk by the French the day before; that they had also destroyed the Arsenal at the mouth of the river. "This," said the Secretary, "means war, and we desire to know how non-combatants belonging to the enemy and resident in our country are to be treated according to the rules of International Law." While I was copying out the principles and precedents bearing on the subject, the same Secretary begged me to hasten my report, "because," said he, "the Grand Council is waiting for it to embody in an Imperial Decree." True enough, the next day a decree from the throne announced the outbreak of war; but it added that non-combatants belonging to the enemy would not be molested. Two of our professors were Frenchmen, and they were both permitted to continue in charge of their classes without molestation.

Hostilities were brought to a happy conclusion by

the agency of Sir Robert Hart. One of his customs cruisers employed in the light-house service having been seized by the French, Mr. Campbell was sent to Paris to see the French President and petition for its release. Learning that President Grévy would welcome the restoration of peace, and ascertaining what conditions would be acceptable, Sir Robert laid them before the Chinese government, putting an end to a conflict which, if suffered to go on, might have ruined the interests of more than one country. In this war and in those peace negotiations the conduct of the Chinese was worthy of a civilized nation. Yet the result of their experience was to make them more ready to appeal to arms in cases of difficulty.

Li's connection with this war was very real, though not conspicuous. Changpeilun, director of the arsenal at Foochow, was his son-in-law. Not only was Li disposed to aid him in taking revenge, he was himself building a great arsenal in the north; and it was, no doubt, owing to efficient succor from this quarter that Formosa was able to hold out against the forces of the French.

VII.

WAR WITH JAPAN.

Both in its inception and in its tragic ending the notable conflict with Japan connects itself with the

name of Li Hung Chang. The Island Empire on the East had long been known to the Chinese, though until our times no regular intercourse subsisted between the two countries. It is recorded that a fleet freighted with youth and maidens was despatched thither by the builder of the Great Wall to seek in those islands of the blest for the herb of immortality; but none of them returned. It was to be a colony, and the flowery robe by which its object is veiled is not sufficient to hide the real aim of that ambitious potentate. Yet, through that expedition and subsequent emigrations, a pacific conquest was effected which does honor to both nations, planting in those islands the learning of China, and blending with their native traditions the essential teachings of her ancient sages.

For centuries prior to our age of treaties, non-intercourse had been enforced on both sides, — the Japanese confining their Chinese neighbors, as they did the Dutch, to a little islet in the port of Nagasaki; and China seeing nothing of Japan except an occasional descent of Japanese pirates on her exposed sea-coast.

To America belongs the honor of opening that opulent archipelago to the commerce of the world. Our shipwrecked sailors having been harshly treated by those islanders, a squadron was sent under Commodore Perry to Yeddo (now Tokio) in 1855, to punish them if necessary and to provide against future outrages

With rare moderation he merely handed in a statement of his terms and sailed away to Loochoo to give them time for reflection. Returning six months later, instead of the glove of combat he was received with the hand of friendship, and a treaty was signed which provided for the opening of three ports and the residence of an American chargé d'affaires. In the autumn of 1859 it was my privilege to visit Yeddo in company with Mr. Ward and Commodore Tatnall. We were entertained by Townsend Harris and shown the sights of the city of the Shoguns when it was still clothed in its mediæval costume. The long swaddling-garb of the natives had a semi-savage aspect, and the abject servility with which their todzies (interpreters) prostrated themselves before their officers excited a feeling of contempt.

Like the mayors of the palace in mediæval France, the Shoguns or generals had relegated the Mikado to a single city of the interior; while for six hundred years they had usurped the power of the Empire, practically presenting the spectacle of two Emperors, one "spiritual" (or nominal), one "temporal" (or real). Little did we imagine that within five years the Shoguns would be swept away, and the Mikado restored to more than his ancient power. The conflagration was kindled by a spark from our engines. The feudal nobles, of whom there were four hundred and fifty, each a prince

within his own narrow limits, were indignant that the Shogun had opened his ports to those aggressive foreigners of the West. Raising a cry of "Kill the foreigners!" they overturned the Shoguns and restored the Mikado. Their fury, however, subsided when they found that the foreigner was too strong to be expelled. A few more years saw them patriotically surrendering their feudal powers in order to make the central government strong enough to face the world. About the same time our Western costume was adopted, and along with it the parliamentary system of Great Britain and the school system of America. Some foreigners were shallow enough to laugh at them when they saw those little soldiers in Western uniform; and the Chinese despised them more than ever for abandoning the dress of their forefathers.

To protect themselves at once against China and Russia, the Japanese felt that the independence of Corea was to them indispensable. The King had been a feudal subject to China since the days of King Solomon; and when at the instance of Japan he assumed the title of Emperor, the Chinese resolved to punish him for such insolence. This was in 1894. The Japanese took up arms in his defence; and though they had some hard fighting, they soon made it evident that nothing but a treaty of peace could keep them out of Peking

Li Hung Chang, who had long been Viceroy at Tien tsin and who had built a northern arsenal and remodelled the Chinese army, had to confess himself beaten. For him it was a bitter pill to be sent as a suppliant to the Court of the Mikado. That China was beaten was not his fault. Yet he was held responsible by his own government and departed on that humiliating mission as if with a rope about his neck. Fortunately for him, during his mission in Japan an assassin lodged a bullet in his head, and the desire of Japan to undo the effect of that shameful act made negotiation an easy task, converting his defeat into a sort of triumph. Happily, too, he enjoyed the counsel and assistance of J. W. Foster, formerly United States Secretary of State. Formosa, one of the brightest jewels in the Chinese crown, had to be handed over to Japan, and lower Manchuria would have gone with it, had not Russia, supported by Austria and Germany, compelled the Japanese to withdraw their claims.

The next turn of the kaleidoscope shows us China seeking to follow the example of Japan in throwing off the trammels of antiquated usage. In 1898, when the tide of reform was in full swing, the Marquis Ito of Japan paid a visit to Peking, and as president of the University, I had the honor of being asked to meet him along with Li Hung Chang at a dinner given by Huyu-fen, mayor of the city, and the grand secretary, Sunki-

anai. It was a lesson intended for them when he told us how, on his returning from England in the old feudal days, his prince asked him if anything needed to be reformed in Japan. "Everything," he replied. The lesson was lost on the three Chinese statesmen, progressive though they were, for China was then on the eve of a violent reaction which threatened ruin instead of progress.

VIII.

WAR WITH THE WORLD.

THE last summer of the century saw the forts at the mouth of the Peiho captured for the third time since the beginning of 1858. It was the opening scene in the last act of a long drama, and more imposing than any that had gone before, not in the number of assailants nor in the obstinacy of resistance, but in the fact that instead of one or two nations as hitherto, all the powers of the modern world were now combined to batter down the barriers of Chinese conservatism. Getting possession of Tientsin, not without hard fighting, they advanced on Peking under eight national flags, against the "eight banners" of the Manchu tribes.

What was the mainspring of this tragic movement? What unforeseen occurrence had effected a union of powers whose usual attitude is mutual jealousy or secret hostility? In a word, it was *humanity*. Spurning petty

questions of policy, they combined their forces to extinguish a conflagration kindled by pride and superstition, which menaced the lives of all foreigners in North China.

In 1898, when the Emperor had entered on a career of progress, the Empress Dowager was appealed to by a number of her old servants to save the Empire from a young Phaeton, who was driving so fast as to be in danger of setting the world on fire. Coming out of her luxurious retreat, ten miles from the city, where she had never ceased to keep an eye on the course of affairs, she again took possession of the throne and compelled her adopted son to ask her to "teach him how to govern." This was the *coup d'état.* In her earlier years she had not been opposed to progress, but now that she had returned to power at the instance of a conservative party, she entered upon a course of reaction which made a collision with foreign powers all but inevitable. She had been justly provoked by their repeated aggressions. Germany had seized a port in Shantung in consequence of the murder of two missionaries. Russia at once clapped her bear's paw on Port Arthur. Great Britain set the lion's foot on Weihaiwei; and France demanded Kwang Chan Bay, all "to maintain the balance of power." Exasperated beyond endurance, the Empress gave notice that any further demands of the sort would be met by force of arms.

The governor of Shantung appointed by her was a Manchu by the name of Yuhien, who more than any other man is to be held responsible for the outbreak of hostilities. He it was who called the Boxers from their hiding-places and supplied them with arms, convinced apparently of the reality of their claim to be invulnerable. For a hundred years they had existed as a secret society under a ban of prohibition. Now, however, they had made amends by killing German missionaries, and he hoped by their aid to expel the Germans from Shantung. On complaint of the German Minister he was recalled; but, decorated by the hands of the Empress Dowager, he was transferred to Shansi, where later on he slaughtered all the missionaries in that province.

In Shantung he was succeeded by Yuen Shikai, a statesmanlike official, who soon compelled the Boxers to seek another arena for their operations. Instead of creeping back to their original hiding-place they crossed the boundary and directed their march toward Peking, — on the way not merely laying waste the villages of native Christians, but tearing up the railway and killing foreigners indiscriminately. They had made a convert of Prince Tuan, father of the heir apparent. He it was who encouraged their advance, believing that he might make use of them to help his son to the throne. Their numbers were swelled by multitudes who fancied that they would suffer irreparable personal loss through the

introduction of railways and modern labor-saving machinery; and China can charge the losses of the last war to those misguided crowds.

Fortunately several companies of marines, amounting to four hundred and fifty men, arrived in Peking the day before the destruction of the track. The legations were threatened, churches were burnt down, native Christians put to death, and fires set to numerous shops simply because they contained foreign goods. Then it was that the foreign admirals captured the forts, in order to bring relief to our foreign community. That step the Chinese Foreign Office pronounced an act of war, and ordered the legations and all other foreigners to quit the capital. The ministers remonstrated, knowing that on the way we could not escape being butchered by Boxers. On the 20th of June, the German Minister was killed on his way to the Foreign Office. The legations and other foreigners at once took refuge in the British legation, previously agreed on as the best place to make a defence. Professor James was killed while crossing a bridge near the legation. That night we were fired on from all sides, and for eight weeks we were exposed to a daily fusillade from an enemy that counted more on reducing us by starvation than on carrying our defences by storm.

About midnight on August 13, we heard firing at the gates of the city, and knew that our deliverers were

near. The next day, scaling the walls or battering down the gates, they forced their way into the city and effected our rescue. The day following, the Roman Catholic Cathedral was relieved, — the defence of which forms the brightest page in the history of the siege, and in the afternoon we held a solemn service of thanksgiving. The palaces were found vacant, the Empress Dowager having fled with her entire court. She was the same Empress who had fled from the British and French forty years before.

She was not pursued, because Prince Ching came forward to meet the foreign ministers, and he and Li Hung Chang were appointed to arrange terms of peace. Li was Viceroy at Canton. Had he been in his old viceroyalty at Tientsin, this Boxer war could not have occurred. That its fury was limited to the northern belt of provinces was owing to the wisdom of Chang[1] and Liu, the great satraps of Central China who engaged to keep their provinces in order, if not attacked by foreigners.

I called on the old statesman in the summer of 1901, after the last of the treaties was signed. He seemed to feel that his work was finished, but he still had energy enough to write a preface for my translation of Hall's

[1] Chang is regarded as the ablest of China's viceroys. He published, prior to the *coup d'état*, a notable book, in which he argues that China's only hope is in the adoption of the sciences and arts of the West.

"International Law," and before the end of another month his long life of restless activity had come to a close at the age of seventy-nine. By posthumous decree, he was made a Marquis.

In the autumn the court returned to Peking, the way having been opened by Li's negotiations. Thanks to the lessons of adversity, the Dowager has been led to favor the cause of progress. Not only has she re-enacted the educational reforms proposed by the Emperor, but she has gone a step farther, and ordered that instead of mere literary finish, a knowledge of arts and sciences shall be required in examinations for the Civil Service.

The following words I wrote in an obituary notice, a few days after Li's death: —

"For over twenty years Earl Li has been a conspicuous patron of educational reform. The University and other schools at Tientsin were founded by him; and he had a large share in founding the Imperial University in Peking. During the last twenty years I have had the honor of being on intimate terms with him. Five years ago he wrote a preface for a book of mine on Christian Psychology, — showing a freedom from prejudice very rare among Chinese officials.

"Another preface which he wrote for me is noteworthy from the fact that it is one of the last papers that came from his prolific pencil. Having finished a translation of 'Hall's International Law' (begun before

the siege), I showed it to Li Hung Chang not two weeks ago. The old man took a deep interest in it, and returned it with a preface in which he says: 'I am now near eighty; Dr. Martin is over seventy. We are old and soon to pass away; but we both hope that coming generations will be guided by the principles of this book.'

"With all his faults — those of his time and country — Li Hung Chang was a true patriot. For him it was a fitting task to place the keystone in the arch that commemorates China's peace with the world."

DAVID LIVINGSTONE.

1813–1873.

AFRICAN DEVELOPMENT.

DAVID LIVINGSTONE.

AFRICAN DEVELOPMENT.

By CYRUS C. ADAMS.

AFRICA is the most ancient and the most recent conquest of the human race. As far as the light of history can be projected into the past, we see Egypt among the first and foremost on the threshold of civilization. The continent discovered last and opened last to the enterprises of the world is still Africa. Why is it that we see there both the dawn of civilization and the tardiest development of human progress?

The reasons are not far to seek. The physical conformation of no other continent is so unfavorable for exploration and development. Africa's straight coastlines, affording little shelter to the primitive ships of early mariners, repelled the enterprising Phœnicians and other seafarers in their eager search for new lands worth colonizing. Nor was it easy for explorers to penetrate into the interior. In its surface Africa has been compared to an inverted saucer, — the high plateaus occupying most of the interior descending to

the sea by short, abrupt, and steep slopes, so that the wide and peaceful rivers of the plateaus are lashed into foam as they approach the ocean by many series of rapids and cataracts.

In all the other continents rivers have been the lines of least resistance to the advance of man. Civilization has developed first along the great rivers. The valleys were first settled, and up these valleys man carried his industries and commerce far inland. Thus the Euphrates and Tigris of Mesopotamia, the Ganges and Indus of India, and the Hoang and Yangtse of China, were the creators of history; but this is true in Africa only of the Nile. All the other rivers have been impediments instead of helpful factors in the formidable task of exploration and development.

The trying climate, also, gave Africa odious repute and delayed for centuries the study and utilization of the continent. When the British expedition under Captain Tuckey attempted to ascend the Congo, in 1816, to see if it were really the lower part of the Niger River, as had been conjectured, nearly all of its members perished miserably among the rapids less than two hundred miles from the sea. Such tragedies as this paralyzed enterprise in Africa until white men learned that the climate was not so deadly, after all, if they adhered to the manner of life, the hygienic rules, that should be observed in that tropical expanse.

In all the other continents, also, explorers have had the advantage of domestic animals to carry their food and camp equipment; but in large parts of tropical Africa the horse, ox, and mule cannot live. The bite of the little tsetse fly kills them. Its sting is hardly so annoying as that of the mosquito, but near the base of its proboscis is a little bag containing the fatal poison. Camels have been loaded near Zanzibar for the journey to Tanganyika, but they did not live to reach the great lake. The "ship of the desert" can never be utilized in the humid regions of tropical Africa.

The elephant is found from sea to sea, but he has not proved to be so amenable to domestication as his Asian brother. He may yet be reduced to useful servitude. The efforts in this direction in the German and French colonies are somewhat encouraging, though in 1901 only six elephants had thus far been broken to work and were daily used as beasts of burden. Explorers of tropical Africa have always been compelled to rely upon human porterage, the most expensive and unsatisfactory form of transportation, with the result that nearly all the great lines of exploration have been extended through the continent at enormous cost.

So most other parts of the world were occupied, colonized, civilized, before Africa was explored. A

continent one-fourth larger than our own was for centuries neglected and despised. "Nothing good can come out of Africa" became proverbial. Seventy years ago Africa, away from the coasts and the Nile, was almost a blank upon our maps, save for fanciful details that are ludicrously grotesque in the light of our present knowledge (1902).

Then dawned the era of David Livingstone. Sixty-two years ago this humble Scotchman went to South Africa as a missionary. It was not long before he became imbued with the idea that missionary service could not be projected on broad, economic, and effective lines till the field was known. The explorer, he said, must precede the teacher and the merchant. We can work best for Christianity and civilization after we learn what the people are and know the nature of their environment. This was the thought that took him into the unknown; that inspired him with unflagging courage and zeal throughout twenty years of weary plodding in the African wilderness among hundreds of tribes who never before had seen a white man. And all the years he was studying the country and winning the love of its people, his faith in Africa, in its abounding resources worth the world's seeking, in the capacity of its people for development, steadily grew till it became the all-pervading impulse of his life. Livingstone's faith converted the world to the belief that, after all, there was good in Africa.

"I shall never forget," said Stanley, one day in New York, "the time when I stood with Livingstone on the shore of Lake Tanganyika, and he raised his trembling hand above his head, leaned towards me as he looked me in the eye, and said in a voice broken with emotion: 'The day is coming when the whole world will know that Africa is worth reclaiming, and that its people may be brought out of barbarism. The world needs Africa; and teachers, merchants, railroads, and every influence of civilization will be spread through this continent to fit it for the place in human interests that belongs to it.' I thought then that Livingstone was an enthusiast and a visionary; but long ago I learned to believe that every word he said was true."

Europe and America were thrilled by the simple narrative of those twenty-two thousand miles of wanderings that brought into the light of day millions of human beings who had been as much unknown to us as though they inhabited Mars. Livingstone did not live to know it, but it was he who kindled the great African Movement, — an outburst of zeal for geographic discovery and economic development such as was never seen before.

Thirteen years ago (1889) a Frenchman named De Bissy completed the largest map yet made of Africa. In the preparation of this great work, which occupied

much of his time for eight years, he used as his sources of information nearly eighteen hundred route and other maps, nearly all of which were the result of the work of explorers in the preceding quarter of a century. All that we know of the geography of over three-fourths of Africa is the work of the past half-century since Livingstone made his first journey in 1849; and we know far more of inner Africa to-day than was known of inner North America three hundred years after Columbus discovered the western world. A little over a century ago, our great-grandfathers were reading in their school geographies that North America had no conspicuous mountains except the Alleghanies; and these mountains and the Andes of South America were believed to be one and the same chain, interrupted by the Gulf of Mexico. Many men not yet bent with years can remember when the interior of Africa was a white space on the maps; but it is not possible to-day to make such a geographical blunder as we have mentioned, about any part of Africa.

It is because of the work he did in those twenty years, sowing all the while the seeds from which sprang the great African Movement, that "the gentle master of African exploration" is acclaimed to-day as one of the world's great men, and that his body rests in Westminster Abbey among the illustrious dead of Britain.

The son of a worthy weaver in Blantyre, Scotland, Livingstone's early life was that of a poor boy, working in a spinning-mill, quiet, sober, affectionate, and faithful in every relation of life. Moved at last by the thirst for knowledge that has distinguished many a humble Scotch boy, he entered the University at Glasgow, studying during the winter months and spending the summers at his trade in the factory, fitting himself all the while for the conquests he little dreamed he was to achieve over difficulties almost insurmountable. A classmate spoke of him as a pale, thin, retiring young man, but frank and most kind-hearted, ready for any good and useful work, even for chopping the University fuel and grinding wheat for the bread. In 1838, when he was twenty-five years old, he went to London to be examined as a candidate for the African missionary service. Two years later he was sent to South Africa, where for eight or nine years he labored among the natives earnestly and unostentatiously north of the place now famous as the site of the Kimberley diamond mines. It was here that he became intimately acquainted with the celebrated missionary, Robert Moffatt, whose daughter he married. His devoted wife accompanied him in some of his later travels, but long before he finished his work her body was laid to rest under the shade of a tree that for years was pointed out to all visitors to the Lower Zambesi.

In 1849 began the series of explorations that continued till his death. "The end of geographical discovery is the beginning of missionary enterprise," he wrote. Burning with zeal to reveal Africa to the world, Livingstone never forgot the main aim of his life, — to open ways for the planting of mission stations among all the scores of tribes he visited. "I hope God will in mercy permit me to establish the Gospel somewhere in this region," he wrote from the land of the Barotse, on the Upper Zambesi. Does he now look down from his eternal home upon that very land whose churches and schools are the fruition of the labors of French Protestants; whose king, in London to attend the coronation of Edward VII., said he wanted more teachers and more men to train his people to build houses and work iron? He prayed that he might live to see "the double influence of the spirit of commerce and Christianity employed to stay the bitter fountain of African misery. The glowing zeal of the Christian philanthropist and the untiring ardor of the born explorer were perfectly blended in the spirit of the great pioneer of modern African discovery.

Livingstone's routes through Africa would extend about seven times between New York City and San Francisco; and in his almost endless marches over plain, through jungle, across mountains and wide rivers,

the natives met him almost without exception in a generous and hospitable spirit. Love was the secret of his success. He won his way by kindness. Give the barbarous African time to see that you wish him well, that you would do him good in ways he knows are helpful, and his affection is evoked.

It was said that the British could never establish their rule over the great Wabemba tribe, southwest of Tanganyika, without a military campaign. In 1894 two humble Catholic fathers entered Lobemba, walked straight to the chief town, and were told that if they did not leave the country in one day they would be killed. As the stern message was delivered, they saw an old woman on the ground in great pain from a severe wound. The news soon spread that these unwelcome strangers had washed and dressed the wound, and made the old woman comfortable. "These people love men," was the word that passed from lip to lip, as the sick and suffering came out from the town to be treated, while thousands of natives looked on. At nightfall the white men were told they might remain another day; they ministered for eleven days to those who needed help, and were then invited to remain the rest of their lives. The mission stations of the White Fathers are to-day scattered all over Lobemba; the country is open in every corner to the whites, and in 1899 British rule was established. The

victory was won, not with guns, but by gentle, helpful kindness.

Livingstone never believed that the sympathies of our common humanity are extinct even in the bosom of a savage. Enfolded in the panoply of Christian kindness, he passed unscathed among the most warlike tribes. No memory of wrong or pain rankled in the heart of any man, woman, or child he ever met. He is known to-day as "the good old man" wherever his path led him in those twenty years.

When explorers began to study the healthful highlands of the Akikuyu tribe in East Africa a few years ago, the natives rushed to arms. "Keep away from us," they said. "One of your white men came through the land, stealing food from our gardens, and killing all who said he ought to pay us for our vegetables. We want nothing to do with thieves and murderers like you."

But no vengeance fell on the head of any white traveller who ever followed in the footsteps of Livingstone. Those explorers have achieved most who adhered to his example of unfailing kindness, mercy, and justice. The brutal German, whose crimes made the Akikuyu hostile to all whites, marked his path with blood from the Indian Ocean to Victoria Nyanza. Serpa Pinto, renowned for the scientific value of his work, aroused condemnation and disgust because he

fought his way through many tribes, among whom Livingstone and Arnot had wandered almost alone and in perfect safety. Fortunately, there have not been many explorers militant. The brilliant discoveries of Grenfell, Delcommune, Lemaire, and others, who are in the first rank of African pioneers, were made without harming a native.

Let us glance at a few of Livingstone's discoveries and form our own conclusions as to whether his sublime faith in the future of Africa has thus far been justified by events. In the depths of the wilderness he discovered the large lake, Mweru, through which the Upper Congo flows. Though white influences have reached that remote region only within the past two or three years, a little steamboat now plies those waters. A photograph of Mpweto, one of the white settlements on the lake, shows the commodious quarters of the Europeans, two long lines of cabins in which the native workmen live, and well-tilled gardens extending for a half-mile along the shore. Livingstone brought to light the coal fields of the Zambesi, the only coal yet known in tropical Africa. While these lines are being written, the British of Rhodesia are preparing to open mines along these deposits. He told the world of the Victoria Falls of the Zambesi, the largest known, a mile wide and twice as high as Niagara. The installation of an electrical plant at this great source of power

is now in progress, and it is hoped within three years to transmit electrically all the power required to work the large copper mines in the north, the coal fields in the east, and to move trains on the Cape to Cairo Railroad for a distance of three hundred miles. The recent improvements in long-distance transmission of power encourages the belief that the Victoria Falls may some day possess large industrial utility for a wide region around them. Coffee plantations on the hills overlooking the long expanse of Nyassa, the splendid fresh-water sea which Livingstone revealed in its setting of mountains, are selling their superior product in London at a high price. The town of Blantyre, among the Nyassa highlands which Livingstone first described, has a newspaper, telegraphic and cable communication with all the world, and industrial schools in which the manual arts are taught to hundreds of natives. Here is the large brick church, now famous, built by native craftsmen, who before Livingstone's time had never seen a white man, and lived in a state of barbarism; an edifice that would adorn the suburbs of any American city, and of which the explorer, Joseph Thomson, said: "It is the most wonderful sight I have seen in Africa." The natives made the brick, burned the lime, sawed and hewed the timbers, and erected the building to the driving of the last nail. They had the capacity, and it was evoked by the genius of one of the most

remarkable men in Africa, Missionary Scott of Blantyre. Steamboats are afloat on five of the six important seas of the great lake region of Central Africa; on two of the three which Livingstone discovered. Only a beginning has been made, for the field stretches from ocean to ocean; but the man who, in 1873 — the year of Livingstone's death, — should have predicted one-half of the achievement of the present generation would have been laughed at as a crack-brained visionary.

Even the surface of Africa is changing, and the truth of Livingstone is not always the truth of to-day. In his first journey, in which he braved the perils of the South African thirst lands, he reached the broad and placid expanse of Lake Ngami, covering an area of three hundred square miles. In the gradual desiccation of that region, the lake has now entirely disappeared. Its place is wholly occupied by a partly marshy plain covered with reeds, and no vestige of water surface is to be seen. He found the little Lake Dilolo so exactly balanced on a flat plain between twe great river systems that one stream from the lake flowed north to the Congo and another south to the Zambesi; but for years past there has been no connection between the lake and the Congo. He sought in vain, like many explorers after him, for the outlet to Lake Tanganyika. The mystery was not solved till,

more than twenty years after, Burton discovered the lake; the solution came when the explorer Thomson and Missionary Hore found the waters of Tanganyika pouring in a perfect torrent down the valley of the Lukuga to the Congo. The explanation of the strange phenomenon is that for a series of years the evaporation exceeds the water receipts, the level of the lake steadily falls, and the valley of the Lukuga becomes choked with grass; then a period follows when the water receipts exceed the evaporation, and the waters rise, burst through the barriers of vegetation in the Lukuga, and are carried to the Congo once more.

It was his second and third journeys that established Livingstone's fame as a great explorer. In those journeys (1853–56) his routes were from the Upper Zambesi to Loanda in Portuguese West Africa, and then from Loanda to the mouth of the Zambesi, nearly twelve thousand miles of travel. The third journey was the first crossing of the continent; and while traversing the wide savannas of the uplands and revealing the Zambesi, the fourth largest river of Africa, from source to delta, he was able to verify one of the most brilliant generalizations ever made by a geologist. Sir Roderick Murchison, President of the Royal Geographical Society, in 1852, deducing his conclusions from the very fragmentary and imperfect knowledge of Africa then extant, evolved his striking hypothesis as

to the physical conformation of the continent, which has been briefly mentioned above and is the accepted fact of to-day. Livingstone was able to prove the accuracy of this hypothesis, and he dedicated his "Missionary Travels" to its distinguished author.

The Makalolo chief, Sekeletu, on the Zambesi River, supplied Livingstone with men, ivory, and trading commissions, that helped the humble and unknown white man, lacking all financial resources except his slender salary, to make the two great journeys which kindled the world's interest and led to the wonderful achievements of our generation. In this noteworthy incident we see the human agencies through which Africa will attain the full stature allotted to her. The Caucasian and the Negro each has his onerous part in the work of bringing the civilized world and Africa into touch and accord.

When Livingstone went home, after his third journey, his fellow-countrymen crowded to see and hear the explorer, who had added more facts to geographical knowledge than any other man of his time. They saw a person of middle age, plainly and rather carelessly dressed, whose deep-furrowed and well-tanned face indicated a man of quick and keen discernment, strong impulses, inflexible resolution, and habitual self-command. They heard a speaker whose command of his mother tongue was imperfect, and who apologized for

his broken, hesitating speech by saying that he had not spoken the English language for nearly sixteen years. In no public place did he ever allude to his personal sufferings, though fever had brought him to death's door and the years had been crowded with the most harrowing cares. The work he had done and would carry on to the end, the new Africa he alone could describe, the faith that had grown and strengthened in every week of his long pilgrimage that the world needed Africa, its resources and peoples, were the burden of every utterance. The great London meeting where he first appeared took practical measures to support him in the work he had begun unaided; and one of the resolutions adopted, declaring that "the important discoveries of Dr. Livingstone will tend hereafter greatly to advance the interest of civilization, commerce, and freedom among the numerous tribes and nations of that vast continent," was prophetic of all the best fruits of the colossal work that has been done to the present time.

During his two years at home, Livingstone wrote his "Missionary Travels." He returned to England once more (1864–65), when he published "A Narrative of an Expedition to the Zambesi," and in 1866 went back to Africa to resume the explorations which ended only with his death. Between 1849 and 1873 he was four years in Europe and twenty years in the field, eating

native food, sleeping in straw huts (in one of which he died), lost to view for many years at a time because he had no means of communication with the coasts. It was this fact that led to Stanley's successful search for Livingstone in 1871. Perhaps no other explorer ever gave so many years to continuous field-work. In this respect he far surpassed the record of any other of the African pioneers.

The discoveries in his last journeys, covering the periods from 1858 to 1864, and from 1866 to 1873, were as brilliant and fruitful as his earlier work, but not so astonishing, because his first years were given to revealing the broader aspects of Africa and its tribes, while his later labors were devoted to more detailed research in a smaller field. This region, about as large as Mexico and Central America, extends north and south, from Tanganyika to the Zambesi, and covers the wide region of the Congo sources between Nyassa and Lake Bangweolo. The greatest results were the discovery of Lake Nyassa and the Shire River, now the water route into East Central Africa; Lakes Bangweolo and Mwero; and the mapping of the eastern part of the sources of the Upper Congo, which Livingstone believed to the day of his death were the ultimate fountains of the Nile. Livingstone's "Last Journeys" was published from the manuscript which his faithful servants brought to the seacoast with the mortal remains of their gentle master.

Not far from the south coast of Bangweolo stands a wooden construction to which is affixed a bronze tablet bearing the simple inscription, "Livingstone died here. Ilala, May 1, 1873." It has taken the place of the tree under which he died, and where his heart, which had been so true to Africa, was buried. As the tree was nearly dead, the section bearing the rude inscription cut by one of his servants was carefully removed and is now in London.

Livingstone's geographical delineations were remarkably accurate, considering the inadequate surveying instruments with which he worked. Dr. Ravenstein, one of the greatest authorities on African cartography, has said: "I should be loath to reject Livingstone's work simply because the ground which he was the first to explore has since his death been gone over by another explorer." It would be marvellous, however, if in the course of twenty years of exploration he had not made some blunders. His map of Lake Bangweolo, for example, was very inaccurate. The Lokinga Mountains, which he mapped to the south of the lake, have not been found by later explorers. These imperfections resulted from the fact that his map of Bangweolo and its neighborhood was largely based upon native information. He knew that his map was inadequate, and as soon as he was able to travel he returned to Bangweolo to complete his survey. He was making

straight for the true outlet of the lake, and was within thirty-five miles of it when one morning his servants found him in his lowly straw hut, dead on his knees. If Livingstone had lived a few weeks longer and been able to travel, he and not Giraud would have given us the true map of Bangweolo.

As a whole, Livingstone's work in geography, anthropology, and natural history, stands the test of time. No river in Africa has yet been laid down with greater accuracy than the Zambesi as delineated by this explorer.

The success of Livingstone was both brilliant and unsullied. The apostle and the pioneer of Africa, he went on his way without fear, without egotism, without desire of reward. He proved that the white man may travel safely through many years in Africa. He observed richness of soil and abundance of natural products, the guarantees of commerce. He foretold the truth that the African tribes would be brought into the community of nations. The logical result of the work he began and carried so far was the downfall of the African slave-trade, which he denounced as "the open sore of the world." What eulogy is too great for such a work and such a man?

In 1898, twenty-one journeys had been made by explorers from sea to sea. Livingstone completed the first journey, from Loanda to the mouth of the Zambesi,

in one year, seven months, and twenty-two days. Nineteen years elapsed before Central Africa was crossed again, when Cameron gave two years and nearly eight months to the journey. It took Stanley two years and eight months to cross Africa, when he solved the great mystery, the course of the Congo; and when he went to the relief of Emin Pasha, in 1887, he was almost exactly the same time on the road. When Trivier crossed from the Atlantic to the Indian Ocean, in 1888–89, in nine days less than a year, the event was held as a remarkably rapid performance. A little later the journey was made by several travellers in from twelve to fifteen months. In 1898, the Englishman, Mr. Lloyd, crossed from Lake Victoria to the mouth of the Congo in three months, about thirteen hundred miles of the journey being by Congo steamboat and railroad. In 1902, the journey from the Indian Ocean to Lake Victoria is made by rail in two and one-half days, — a journey that occupied Speke for nine, and Stanley for eight, months. With the present facilities, the continent may be crossed by way of the lake region and the Congo in about three months. The era of long and weary foot-marches has nearly ended; now succeeds travel by steam.

No influence has been so potent in improving the art of the explorer, or in raising the standard of the work required of him, as the enormous interest that for thirty

years past has centred in African exploration. The larger part of the best achievements of the explorers of the present generation in scientific investigation, and in an approach to scientific map-making, are found in tropical Africa. Many of the hundreds of the route surveys are not unworthy to be compared with those of Pogge and Wissmann, when they laid down on their map every cultural and topographic feature for two miles on both sides of their route, from Angola to the Upper Congo. The extreme care with which some of the best explorers have performed their tasks is illustrated by the remarkable achievement of the late Dr. Junker along the Mobangi River. After years of service, his scientific equipment had become practically worthless. He started on his four-hundred-mile journey down the river through the jungle, with absolutely no instrument except a compass to aid him in determining his positions. Endeavoring, by the most scrupulous care, to make up as far as possible for his lack of scientific outfit, he trudged through the grass, compass in hand, counting every step. Every fifteen minutes he jotted in his notebook the distance and the mean direction travelled. At night he used these accumulated data to lay down on his route map the journey of the day. For many weeks he kept up this trying routine till he reached his furthest west, and again till he had returned to his starting-point, whose latitude and longitude he

had previously determined. When he returned to Europe, Dr. Hassenstein and he made a map from the data Junker had collected, and fixed the position of his furthest west. This position was found later by the astronomical observations of Lieutenant Le Marinel to be less than two miles out of the way.

One of the latest to win a large prize in African discovery is Dr. A. Donaldson Smith, a young physician of Philadelphia, in the northeastern region known as Somaliland and Gallaland. His method may be mentioned here as an illustration of the kind of work that geographers now require. Before he began his explorations, he took a thorough course in the use of surveying instruments and the methods of accurately laying down his positions and making a route map. Many a cartographer, burning with desire to draw a good map of a newly explored region, has been driven to despair by the inadequacy of the route surveys in his hands. Not a few of these surveys have been unworthy of reproduction in the books of the explorers who made them, and the best that could be done was to generalize their information on maps of comparatively small scale. But Donaldson Smith's route-maps appear in his book on the comparatively large scale of 1: 1,000,000 (about sixteen statute miles to the inch), and they are worthy of that treatment, for his surveys and observations for geographical positions were recorded in such a way that

their value might be easily ascertained by any one familiar with such computations. His route-maps have been found to be admirable map-making material; thus, he has not only traversed a new region of great extent, but has given in his map ample materials which may be employed by any atlas-maker in the production of good maps of all the territory that came under his observation. When Sir Clements Markham presented to Dr. Smith the Patrons' Medal of the Royal Geographical Society, he said: "You have not, like an ordinary explorer, made a common route survey, but you have made a scientific survey, a triangulation frequently checked by astronomical observations with theodolite and chronometer."

Most African explorers have been painstaking, conscientious workers, eager in their quest for the truth, desirous to report nothing but the truth, and treating the lowly and ignorant they have met as men, with sensibilities like their own, capable of gratitude for a kindness and keenly sensitive to an outrage. The world has recognized and applauded such heroes of discovery,—the men who faced hardship and peril, enduring and sacrificing much that knowledge might grow; who had to conquer not only unkind Nature, but to overcome the ignorant violence of man. And not a few of the leaders in this work have carried it out with a degree of tactfulness, humanity, gentleness, and kindliness of spirit

amounting to genius. Some of them spent months in disguise, collecting facts of the highest scientific value among fanatical Mohammedans who would have killed them if they had known their secret. Such men were Burton in Harrar, Dr. Lenz in Timbuctoo, and De Foucauld and Harris in Morocco, who, in stained skins and borrowed costumes, personated merchants and devotees and doctors and Jews; and most of whom have enriched the literature of discovery with valuable books. Men also such as Dr. Junker, who, rich as he was, left his home to spend eight years alone among the savages of the Welle Makua basin in Central Africa, living on their food and in their huts that he might minutely study the people in their country; or Grenfell, who has travelled far more widely in the Congo basin than Stanley or any of his followers except Delcommune, and revealed to the world more river systems and unknown peoples than they, and who, in his long career as an explorer, never fired a shot upon a native, though his life was often threatened. These men, and others like them, have exemplified the manysidedness of human resources against a great variety of peril and obstacle, as no other explorers in any other part of the world have had an opportunity to do in equal measure. Their work, with its environment of almost overwhelming difficulty, should be known to our youth as most forceful illustrations of what good men may dare and do in good causes and in a worthy manner.

There have been some exceptions to this rule. A few men have been less anxious to perform useful service than to figure in the newspapers and pose before their public. One day a man stood on the north shore of Victoria Nyanza, and looking south he saw land. When he returned to London he published a sensational book, in which he said it was ridiculous for Speke to assert that he had discovered a lake as large as Scotland, one of the greatest lakes in the world. "Why," said the writer, "I have stood on the north shore of the Victoria Nyanza and looked south and seen the southern shore. Lake Victoria is only an insignificant sheet of water, after all the talk of its being second only to Lake Superior."

What he really saw was the chain of the Sesse Islands extending far out into the lake. His book was scarcely off the press when the letters describing Stanley's boat journeys around the shores of Victoria Nyanza began to be published in London and New York; and the foolish fellow was compelled to recall all the copies of his book that had not passed beyond his reach, and eliminate the statements that made him so ridiculous. Fortunately, there are not many explorers of this stripe.

All who watched the progress of African discovery were constantly reminded that geographical progress is usually made only by slow and painful steps. They

saw an explorer emerge from the unknown with his notebooks and route maps replete with most interesting facts for the student and the cartographer. Then another explorer would enter the same region, discover facts that had escaped the notice of the pioneer, correct blunders his predecessor had made and perpetrate blunders of his own; so explorer followed explorer, each adding something to geographical knowledge, each correcting earlier misconceptions, till the total product, well sifted by critical geographers, gave the world a fair idea of the region explored; but not the best attainable idea, for scientific knowledge of a region comes only with its detailed exploration by trained observers, equipped with the best appliances for use in their special fields of research. This is the advanced stage of geographical study, which is now being reached in many parts of Africa. It was Livingstone's task, in 1859, to inform us that there was a great Lake Nyassa. It was Rhoades's task, in 1897–1901, to make a careful and accurate survey of its coast-lines, and to sound its depths, so that we now have an excellent idea of the conformation of the lake bottom. Between Livingstone and Rhoades came many explorers, each adding important facts to our knowledge of this great sheet of water nearly twice as large as New Jersey.

As each explorer came from the wilds, our maps were corrected to conform with the new information

he supplied; and if we should examine the maps of Africa in school geographies, atlases, and wall maps, from the time of Livingstone to the present day, we should see that, as relates to nearly every part of Africa, they have been in a continual state of transition.

For years our only map of Victoria Nyanza was that which Speke made on his second journey to the lake, in 1860–62; but Speke saw the great lake only at one point on its south shore, and along its northwest and north central coasts. His map, being based very largely upon native information, was in many respects most incomplete and erroneous.

Then came Stanley's survey of the lake, made in a boat journey around its coasts, and for years his map supplanted that of Speke. But he was not able to follow the shore-line in all its intricate details. His mapping was a great advance upon that of Speke, but it was necessarily rough and imperfect. He missed entirely the deep indentation of Baumann Gulf and the southwestern prolongation of the lake, surveyed by Father Schynse, in 1891. Stanley's map, modified by the partial surveys of various explorers, is still our mapping of the lake; but if the reader will watch the maps for the next year or so, he will doubtless observe important changes in the contours of Victoria Nyanza; for all the maps, from Speke to those of 1902, will be placed on the shelf to serve only as the historical

record of the good, honest work which a number of explorers have done. Commander Whitehouse has recently spent thirteen months surveying with infinite pains these coasts and islands. "I seem to see," writes Stanley of this important service, "the sailor, with his small crew and his little steel boat, wandering from point to point, crossing and recrossing, going from some island to some headland, taking his bearings from that headland back again to the island, and to some point far away."

Commander Whitehouse has made a new delineation of the entire 2,200 miles of coasts, and the results of his survey will be used in making all the maps of the lake. His map in turn will undoubtedly be replaced some day by detailed topographic surveys of the best quality, such as the British already contemplate making of that entire region.

A wall map recently in use in one of the public schools of New York City was a curious example of ignorant compilation. It exhibited the Victoria Nyanza of Speke, the Bangweolo of Livingstone, and the Upper Congo of Stanley, all obsolete for practical purposes years before this map was printed. Most of our home map-makers were very slow in availing themselves of the rich materials constantly supplied for the maps by the army of explorers in Africa. But the most alert cartographers, particularly between 1880 and 1895, could not keep their

maps abreast of the news of discovery as it came to Europe. More men and energy and money were utilized in those fifteen years of African discovery than in the first century and a half of American exploration. The route or mother-maps, some covering a wide extent of country, others devoted to a small area, or a short line of travel, were going to Europe for the improvement of atlas sheets by nearly every steamer. Father Schynse's chart of the southwest extension of Victoria Nyanza had hardly been utilized in European map-houses before it was replaced by Dr. Baumann's more accurate survey. Mr. Wauters of Belgium withdrew his large map of the Congo Basin from the printer four times, in order to include fresh information before it was finally issued to the public.

This process is still going on, though more slowly. The mapping we see of Lake Tanganyika, one of the longest lakes in the world, has been in use for seventeen years since missionary Hore made his boat journey of one thousand miles around its coasts, but the new map of the Moore expedition now being introduced gives the main axis of the lake a more northeast and southwest direction. The Hore map has met the fate that usually overtakes the early surveys of every region. It rendered good service as long as it was the best map; but the Moore expedition had first-rate appliances for computing longitudes, and as Captain Hore

lacked these, it is not strange that his map has been found to be defective.

The world has been treated to many geographical surprises in the course of this incessant transformation of the map of the continent. Many of us may remember in our school geographies, the particular blackness and prominence of the Kong Mountains, extending for two hundred miles parallel with the Gulf of Guinea They were accepted on the authority of Mungo Park, Caillié, and Bowditch, all reputable explorers who had not seen the mountains, but believed from native information that they existed. The French explorer, Binger, in 1887 sought in vain for them. Later explorers have been unable to find them. They are, in fact, a myth, and will be remembered chiefly as a conspicuous instance of geographic delusion. It had long been supposed that the navigation of the Niger River, the third largest river in Africa, was permanently impaired by the Bussa Rapids, about one hundred miles in length, where Mungo Park was wrecked and drowned. But Major Toutée, a few years ago, when assailed by hostile natives, made a safe journey with his boats through the rapids; and Captain Lenfant, in 1901, carried 500,000 pounds of supplies up the river and through the rapids to the French stations between Bussa and Timbuktu. He had a small, flat-bottomed steamboat and a number of little boats pro-

pelled by fifty black paddlers. He says that by the land route he would have required 12,000 porters, and they would have been one hundred and thirty days on the road.

It was believed that a land portage would always be necessary between the sea and the Zambesi, above the delta, till 1889, when Mr. Rankin discovered the Chinde branch of the delta, so broad and so deep that ocean vessels may ascend it and exchange freight with the river craft.

It has been found that more water pours into the ocean through the Congo's mouth, which is six miles wide, than from all the other rivers in Africa together It is second among the world's rivers, and the dark detritus it carries to the Atlantic has been distinctly traced on the ocean bed for six hundred miles from the land. Some geographers still believed thirty years ago that all the waters of its upper basin might be tributary to the Nile. Map-makers have been kept very busy recording discoveries on the Congo. About one hundred explorers, some of them missionaries and many employees of the Congo Free State, have mapped the whole basin along its water-courses, and discovered the ultimate source of its main stream. Our ideas of the hydrography of this great basin have been revolutionized since Stanley, second only to Livingstone among the great African explorers, in 1877 revealed the course of the main river

On his map, for example, he showed the southern tributaries as probably flowing nearly due north; but all except one of these rivers rise in the east and flow far to the west. When Wissmann was sent to the Upper Kassai to follow it to the Congo, he was greatly surprised to find himself floating westward week after week. When he reached the Congo a steamboat was waiting for him at Equatorville, two hundred miles further up the river, where he was expected to emerge. Schweinfurth believed the Welle Makua flowed north to Lake Chad on the edge of the Sahara; seventeen years later, after six or seven explorers had tried to solve the problem, the river was found to be the upper part of the Mobangi tributary of the Congo, larger than any rivers of Europe, excepting the Volga and Danube. While Stanley was for five years planting his stations on the Congo, he knew nothing of this great tributary, 1,500 miles long, whose mouth was hidden by a cluster of islands which his steamers repeatedly passed. Missionary Grenfell, on his little steamer, was ascending the Congo one day, when accidentally he got into the mouth of the Mobangi and went on for one hundred miles before he discovered that he had left the main river. Few explorers have unwittingly stumbled upon so rich a geographical prize.

While exploratory enterprises have been centred largely in tropical Africa, no part of the continent has

been neglected. We now know that large areas of the Sahara are underlaid by waters which need only be brought to the surface to cover the desert around them with verdure; that most of the rain falling on the south slopes of the Atlas Mountains sinks into the earth to impermeable strata of rock, along which it makes its way far out into the desert; that where the surface is depressed so that these waters come near to it, there are wells for the refreshment of the camel caravans, and oases, blooming islands of green, in the sterile wastes; and that artesian wells bring inexhaustible supplies of water within reach, so that millions of date palms have been planted along the northern edge of the desert in southern Algiers and Tunis, making these regions the largest sources of the world's supply of dates.

It has also been discovered why there are very large areas of dry or desert lands in Africa. The Sahara and the southwest of Africa are deserts because the prevailing winds, the carriers of moisture, blow towards the sea instead of away from it, and consequently are always dry. The winds from the Indian Ocean crossing the highlands of Abyssinia are wrung nearly dry while passing the mountains, and so Somaliland and the lowlands to the south of Abyssinia are parched.

It has been found that the most of South Africa stands so high above the sea that the influences of a

temperate climate are projected far towards the Equator; so that many white men, women, and children are living and thriving on farms in Mashonaland, seven degrees of latitude nearer the equator than the south end of Florida. This fact will profoundly influence the development of South Africa. It is to be the home of millions of the white race, the seat of a highly civilized empire, whose business relations with the rest of the world will be to the advantage of every trading nation The presence of these millions of toilers will vitally affect the work of developing tropical Africa which is now absorbing such enormous treasure and energy; for South Africa is to be brought by railroads to the very doors of the tropical zone.

It is hoped that such facts as these, even though very briefly stated, may convey broadly a correct impression of the magnitude of African exploration, since its revival about the time that Livingstone died. It is impossible in brief space to signalize the good work that many of the most conspicuous pioneers have done. he world rendered tardy tribute to the notable achievements of some of them. When Rebmann discovered Kilimanjaro, not far from the equator, and told of the snows that crown the loftiest of African summits, it was decided by British geographers that Rebmann's snow was probably an imaginary aspect. The snow was there, and plenty of it, but Rebmann died

before justice was done to his faithful labors. When Paul du Chaillu described the Obongo dwarfs of West Africa, his narrative was discredited; but four or five groups of dwarfs, probably numbering many thousands, are now known to be scattered from the lower border of Abyssinia to the Kalahara desert in the far south. The ancients had heard of the dwarfs, but the geographers of the eighteenth century expunged from the maps of Africa about all that the geographers of Greece and Rome, as well as those of later times, placed on them; and the nineteenth century was slow in crediting the early investigators even with statements that were wholly or approximately accurate.

A curious history is connected with the discovery of the northeastern group of pygmies, a little south of Abyssinia. No white man had ever seen them, but about fifteen years ago Dr. Henry Schlichter, of the British Museum, collected all the information which natives had given to missionaries, traders, and explorers of the existence of these little people some hundreds of miles from the sea. Sifting all this evidence, he concluded that these dwarfs really existed, and that they lived in a region which he marked on the map north of Lake Stefanie. Donaldson Smith had not heard of Schlichter's paper, and knew nothing of these dwarfs, but he found them in 1895 in the region which Schlichter had indicated as their probable habitat.

The broadest generalization with regard to the African tribes is that which separates most of the people south of the Sahara Desert into two great groups, — the Negro tribes, whose habitat may be roughly indicated as extending between the Atlantic and Gallalan in East Africa, with the Sahara as their northern, and the latitude of the Cameroons as their southern, boundaries; and the Bantu tribes, occupying nearly all of Africa south of the Negroes. The distinction between these two great groups is not based upon special differences as to physical structure, mental characteristics, habits, or development, but depends solely upon philological considerations, the languages of the Negroes and the Bantus forming two distinct groups. Most of the slaves who were brought to our country were Negroes, while most of those transported to Latin America were from the Bantu tribes.

One fact that stood out above all others in the study of the African natives, was the remarkable prevalence of cannibalism in the Congo basin. In all his wanderings, Livingstone met only one cannibal tribe, — the Manyema living between Tanganyika and the Upper Congo; but though they are not found near the sources of the river, nor near its mouth, they occupy about one-half of the Congo basin. They are regarded with fear and abhorrence by all tribes not addicted to the practice. They number several millions. Instead of being the

most debased of human creatures, many of them, in physical strength and courage, in their iron work, carving, weaving, and other arts, are among the most advanced of African tribes. The larger part of the natives in the service of the Congo Free State are from the cannibal tribes. The laws now impose severe penalties for acts of cannibalism, and the evil is decreasing as the influence of the state is extended over wider areas. A few isolated tribes along the Gulf of Guinea are also cannibals.

There is no doubt that the helpful influences of the Caucasian in every part of Africa so far outweigh his harmful influences that the latter are but a drop in the bucket in comparison. It is most unfortunate that a certain admixture of blundering, severity, brutality, and wickedness seems inseparable from the development of all the newer parts of the world. The demoralizing drink traffic, the scandalous injustice and cruelty of some of the agents of civilized governments, are not to be belittled or condoned. But there is also a very bright side to the story of the white occupancy of Africa.

The family of a deceased chief in Central Africa recently preserved his body unburied for fourteen months, in the hope that they might prevail upon the British Government to permit the sacrifice of women and slaves on his grave, that he might have companions

of his own household in the other world. He was buried at last, without shedding a drop of blood. Human sacrifices are now punishable with death throughout a large part of barbarous Africa, and this terrible evil is being abated as fast as the influence of the European governments is extended over new regions. The practice of the arts of fetichism, a kind of chicanery, most injurious in its effects upon the superstitious natives, is now punishable throughout the Congo Free State and British Rhodesia. Arab slave-dealers no longer raid the Congo plains and forests for slaves, killing seven persons for every one they lead into captivity. Slave-raiding has been utterly wiped out in all parts of Africa, except in portions of the Sudan and other districts over which white rule has not yet been asserted. The Arabs of the Congo, who went there from East Africa solely that they might grow rich in the slave trade, are now settled quietly on their rice and banana plantations. The sale of strong drink has been restricted by international agreement to the coast regions, where the traffic has long existed, and its evils are somewhat mitigated there by the regulations now enforced. Fifty thousand Congo natives who would not carry a pound of freight for Stanley in 1880, are now in the service of the white enterprises, many of them working, not for barter goods, but for coin. Many of the missionary fields are thriving, and

wonderful results have been achieved in some of them. In Uganda, where Stanley in 1875 saw King Mtesa impaling his victims, there are now ninety thousand natives professing Christianity, three hundred and twenty churches, and many thousands of children in the schools. Fifty thousand of the people can read. Between 1880 and 1882 Stanley carried three little steamboats around 235 miles of rapids to the Upper Congo. Eighty steamers are now afloat there, plying on nearly 8,000 miles of rivers, and connected with the sea by a railroad that has paid dividends from the day it was opened. At the end of 1890 there were only 5,813 miles of railroad in Africa. About 15,000 miles are now in operation, and the end of this decade is certain to see 25,000 miles of railroads. Trains are running from Cairo to Khartum, the seat of the Mahdist tyranny, in the centre of a vast region which, until recently, had been closed for many years to all the world.

These wonderful results are the fruits of the partition of Africa among the European states. With the exception of some waste regions in the Libyan desert, which no one has claimed, Morocco, Abyssinia, and Liberia, every square mile of African territory has been divided among European powers, either as colonies or as spheres of influence. The scramble of twenty years for African lands is at an end, there now being no valuable areas that are not covered by the existing agreements.

It is no mere love of humanity that has impelled the European countries to divide these regions among themselves. We can scarcely realize the intensity of the struggle for existence in many of the overcrowded parts of Europe. Their factories are enormously productive, but their people will suffer for food unless they can export manufactures. The crying need for new markets, for new sources of raw material, drove these states into Africa. And we should be glad, for Africa's sake, that they have gone there, even though the desire to make money is one of the most powerful incentives.

It is under the protective ægis of these governments that explorers are settling down in smaller areas to see what may be found between the explored water-courses, to study the continent in detail, to give to our knowledge of Africa the scientific quality now required. The greatest geographical work there in recent years is the extension of a line of stations across tropical Africa by Commander Lemaire, each position astronomically fixed by the most careful methods, constituting a base-line east and west through Africa to which the scientific mapping of a very large area will be referred.

The day of the minuter study of the whole continent has now dawned, and we are witnessing a most notable work. All the colonial powers, and the Germans most conspicuously, are studying the economic questions relating to their African possessions. The suitability of

climates for colonists, the essential rules of hygiene, the development of agriculture, labor supplies, transportation and commercial facilities, and many other problems are receiving the most careful attention. Experiment stations are maintained in the colonies and colonial schools at home, to fit young men for service in the field. The Germans have already proved that cotton and tobacco are certain to become profitable export crops.

The mine-owners of the Witwatersrand, on which Johannesburg stands, have begun a movement which they hope will result in the immigration of 100,000 white laborers to the mining field. We may look for remarkable development in South Africa, whose promise is larger than that of any other part of the continent. Whatever may be said of some of the methods by which the British have enlarged their empire, their rule has blessed the barbarous peoples whose countries they have absorbed. The task of improving the few millions of blacks in South Africa, and of developing the large and in some respects wonderful resources of that region, will be greatly assisted by the incoming of hundreds of thousands of Europeans, bringing with them the arts and other blessings of civilization. The future of none of the newer parts of the world is brighter with the hope of great development than the region between the Zambesi and the Cape of Good Hope.

In order to observe intelligently the progress of South Africa in coming years, the limitations as well as the advantages of the country must be kept in view. More than half of it, including the entire western half, is deficient in rainfall and can never be the home of a dense white population. Some mining will develop on those broad, dry plains and sandy wastes; some agriculture where irrigation is possible; and great wool-growing wherever thrive the nutritious grasses on which 13,000,000 sheep, scattered over the Karroo of Cape Colony, and 4,000,000 in the little Orange Free State, were grazing before the recent war. Wool-growing will always be the greatest grazing industry, though cattle and horses are raised in large numbers, and the fine, soft hair of the Angora goat is second only to wool in export importance.

A narrow strip of fine farm lands across the south end of Africa, another along the southern border of the former Boer republics, and a large area among the highlands of Mashonaland, far towards the equator, produce nearly all the crops of the temperate zones. It is not yet certain, however, that South Africa will ever raise enough wheat for a great white population. On the northern slopes of the hills, east and northeast of Cape Town, are thousands of acres of grapes. Cape Colony is becoming one of the important wine countries; and in February and March, large quantities of

grapes, peaches, nectarines, and plums are placed in cool rooms on steamships and sent fresh to British markets almost before English fruit trees are in bloom.

East of the grape region is an area peculiarly adapted for the cultivation of tobacco; and east of the tobacco district, north of the coastal belt of wheat in a region of sandy scrub, the bush country, are the ostrich farms, in the hands mainly of men of considerable capital, who supply nearly all the feathers derived from the domesticated ostrich. The plumes are sometimes worth as much as $200 a pound, the ordinary feathers bringing from $5 to $7 a pound. Natal is unique in two of its agricultural industries, being the only colony that is producing tea and important quantities of cane sugar.

But gold, widely scattered over the country on the interior plateau, exceeds in value all the other exports together. The world never saw such a development of gold mining in a small area as has occurred on the Witwatersrand, where Johannesburg stands. The Witwatersrand (White River Slope) is a slight elevation, the water parting between rivers, about one and a half miles wide and 125 miles long. On twenty-five miles of the rand, at and near Johannesburg, more gold was produced in the year before the Boer war than was yielded by any other country in the world. The other rich mining regions of the Transvaal and other parts of South Africa have been completely dwarfed by the won-

derful product of the rand. The surveys in Matabeleland and Mashonaland show gold-bearing areas 5,000 square miles in extent, which as yet have practically no development. The mining companies on the rand and elsewhere are now preparing for far larger operations than ever before.

The Kimberley diamond mines, turning out more than $20,000,000 worth of rough stones a year, supply nearly all the diamonds of commerce. Two other diamond centres in the Orange River Colony have scarcely been touched, and diamonds are found on the Limpopo River and in other regions where no mining has been undertaken. The minerals of South Africa, including iron and coal, bid fair to be for many years the largest sources of wealth; and in wool, hides, mohair, fresh fruits, and some other products, South Africa may rival other parts of the world.

There are no good natural harbors except Delagoa Bay in Portuguese East Africa, but by great expenditure the harbors of Cape Town, Port Elizabeth, East London, and Durban have been adapted for great commerce. Many persons mistakenly regard Cape Town as the chief commercial centre of South Africa. It is so only in respect of the export of gold and diamonds. As it is not centrally situated for business with the interior, more of the things that South Africa sells to and buys from the rest of the world, excepting gold and diamonds,

pass through Port Elizabeth than through any other port. Here is centred the largest wholesale trade.

What South Africa needs is more railroads and more white labor. Manufacturing industries on an important scale are yet to come, for as yet the white population is too sparse to develop anything but the natural products of the country.

The broad summing up of the future work in Africa is that the native will be taught to help himself. The destiny of the continent depends largely upon his development, for great parts of Africa may never be adapted to become the home of many white men. The most powerful motives, philanthropic and selfish, incite and will sustain the work of helping these millions to rise to a higher plane of humanity. This work, now well begun, is the great task which in the present century will call for all the knowledge, patience, humanity, and justice that may be brought to bear upon the problem of reclaiming Africa.

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No comprehensive compendium of the history of African exploration has yet been written. Our knowledge of the geography, peoples, and resources of Africa is treated with considerable detail in a number of works such as Reclus's "Africa" (in "The Earth and Its Inhabitants") and Sievers's "Afrika" (German). A very large part of the exploratory enterprises in Africa have not been described in books, but only in the reports of the explorers, printed with their original maps in the publications of many geographical and missionary societies.

SIR AUSTEN HENRY LAYARD.

1817–1894.

MODERN ARCHÆOLOGY.

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By WILLIAM HAYES WARD, D.D., LL.D.

IT was twenty-three long centuries ago that a Greek soldier of fortune, who had the honor to be also a disciple of Socrates, was leading ten thousand mercenaries back to their native land after their famous failure to set the Younger Cyrus on the throne of Persia. Clearchus and the other generals had been treacherously murdered. Dispirited, almost hopeless on their way to the longed-for Black Sea, in anticipation of the perilous and tedious journey, past wild mountains and wilder Kurds, they toiled up the valley of the Tigris River. Of one incident of their journey their historian and leader makes no record. They reached the spot where now stands the city of Mosul. On the bank of the river their eyes fell on a bare and lofty hill. They did not know, they never suspected,— Xenophon wrote no word of it,— that under that hill lay buried the ruins of one of the mightiest conquering cities that had ever ruled the world. From the palaces

of that hill, Ninus and Semiramis and Sardanapalus had led their conquering armies, all now covered with silence.

Two centuries earlier, in 606 B.C., there had occurred one of the most tremendous catastrophes recorded in all the grim annals of war. After a thousand years of primacy in the East, but twenty years after the death of Sardanapalus (the Greek name of Asshurbanapal), who had carried his armies to Egypt and had made his capital the centre of the world's culture and magnificence, as it was of its cruel and hated power, Nineveh was captured, buried, and utterly desolated by a horde of savage Scythians from the mountains of the north and east, such people as we now call the Kurds. Its palaces had no lofty Greek columns to stand for memorials, as at Palmyra or Persepolis; and when the outer casings of brick and alabaster were cracked away, and the ashes of the upper stories and the clay of the inner constructions, soaked by the rains, covered the ruins of temple and palace, nothing was left to mark the site but the grass-covered hill. No wonder that the learned scholar of Socrates saw nothing, knew nothing of the city, most glorious and most detested of all the cities of the earth. But in its day the overthrow of Nineveh and the destruction of the Assyrian Empire had been the most terrible event in the world's history. How the Hebrew prophets gloated over it!

"Where now is the den of the lions, and the feeding-place of the young lions, where the lion and the lioness walked, the lion's whelp, and none made them afraid? Wo to the bloody city; it is all full of lies and rapine; the prey departeth not. The noise of the whip, and the noise of the rattling of wheels, and prancing horses, and bounding chariots, the horsemen mounting, and the flashing sword, and the glittering spear, and a multitude of slain, and a great heap of corpses, and there is no end of the bodies. There is no assuaging of the hurt; thy wound is grievous; all that hear the report of thee clap their hands over thee: for upon whom hath not thy wickedness passed continually?" And another prophet had uttered the curse: "The pelican and the porcupine shall lodge in the capitals thereof; their voice shall sound in the windows; desolation shall be in the thresholds; for he hath laid bare the cedar-work. This is the joyous city that dwelt carelessly, that said in her heart, 'I am, and there is none besides me!' How is she become a desolation, a place for beasts to lie down in! Every one that passeth by her shall hiss, and wag his hand."

Thus fell Nineveh, amid the universal rejoicing of the nations, and thus, seventy years later, fell Babylon also, which, in the short interval, Nebuchadnezzar had made more magnificent than even Nineveh had been, beautified for its capture by Cyrus. But before Baby-

lon was the capital of Chaldea, or Nineveh the capital of Assyria, the city of Calah had been the seat of its kings, and a mighty mound — they call it Nimroud now — "as high as St. Paul's steeple," old travellers loved to say — marks the place on the east bank of the Tigris, twenty miles south of Nineveh; and, before Calah, Assyria had an earlier capital forty miles still nearer the Babylonian border, at Asshur, now Kalah-Shergat, on the west of the Tigris; and each capital had its palaces and records, and all are now equally buried in clay and utter oblivion. And before the Babylon of Nebuchadnezzar, and long centuries before Nineveh or Calah or Asshur, there had been mighty kingdoms in Babylonia, of which the world had quite forgot the names, only vague rumors remaining in song or legend of Nimrod and Chedorlaomer and Ur of the Chaldees, — only what was preserved in the dimmest records of the Hebrew Scriptures. Empires were lost, buried in chiliads of forgetfulness; would they ever be recovered?

And how much else was lost, what kingdoms, what empires buried before Hebrew or Greek history began to take notice of the world outside and put them in books, no one knew, no one knows even yet, although so much has been found. The fame of Egypt was never quite forgotten, nor all its history, for Egypt was the world's granary, and closely accessible to the ships

of Corinth and Rome; and Egypt never lost her civilization in all her long succession of enslavement. But what memory had been kept of the Ionia and Greece of the days before Homer? What of the early civilization of Cyprus and Crete? Only the name of Minos, a judge in Hell. What of Persia and Elam? Were they uninhabited before the times of Xerxes and Cyrus? And who were these kings, Cyrus and Xerxes, whose names burst upon us with dim light out of a black antiquity? Even they were but shadows on a screen, just seen and disappearing. What kings and kingdoms came before them and passed away? Has history no record? Not a word. Only black vacuity has been left behind them. And there was that other empire of the East, that of the Hittites, which we now know ruled Asia Minor and Syria and contested the rule of the world with Assyria and Egypt centuries before Agamemnon and Achilles, but so utterly buried and forgotten that not a line of its history was left, not even enough to let the sharpest scholar ask a question or suspect that it ever built capitals and fought victories and produced a civilization the harvest of which we still enjoy. Nothing was left of them but their names in a Hebrew list of tribes, — "Amorites and Jebusites and Hivites and Hittites."

Yet all these lost tribes, nay, lost nations, had left their records behind them, only they were buried under

ground and out of sight. What a travesty it is on history and civilization, what an impeachment of the glory of these later Christian centuries, that the lands which these old empires crowded with a busy population should now be among the most desolate and inaccessible on the face of the earth! There we see the curse of the Moslem religion, and still more of the Turkish government. Wherever the Turk has carried the sword and the Koran, there is blight and death. Only as soldiers and scholars of Europe have forced their way into these seats of ancient empires has it been possible to ask and learn what is buried beneath their gray desolation.

The man who did more than any other to awaken the interest of the world in the search for forgotten empires was Sir Henry Layard, the excavator of Nineveh. But before his day another man had startled the world with what we may call the discovery of Egypt. That man was Napoleon Bonaparte, the man whose sword was a ploughshare turning up the fallow fields of Europe, and sowing strange crops of tyranny and liberty, and whose ambition it was to set up a new throne in the land of the Pharaohs and Ptolemies. The mighty ruins of Karnak and the imperishable pyramids filled him with amazement, and he set the scholars of France at work to publish in massive folios the wonders of that most ancient land. Then was found the

Rosetta Stone, with its inscription in two languages, — Greek, which any scholar could read, and the Egyptian hieroglyphics, which no living man could read. But here was the key. The words *Ptolemy* and *Cleopatra* were in the Greek text, and it was not hard to find what were the combinations of characters that stood for these words in the Egyptian. The letters *p*, *t*, and *l* were in both names. The hieroglyphic signs found in both names must be these three letters. That beginning gave all the other signs in both words, and the rest of the alphabet soon followed. Justly great is the fame of the Frenchman Champollion, who has the honor of having first deciphered and read this lost language, and opened to us the secret treasures of its history and religion.

But with the exploration of Egypt the scholarship of the world was satisfied for fifty years. No one seemed to think to ask what might be hid under the soil of nearer Palestine and Syria and Asia Minor; much less did they seek to uncover the buried capitals of Assyria and Babylonia. Scholarship was devoted to books, to old manuscripts in convent libraries, to recovering what the wise men of Greece and Rome had written, and trying to wrest new facts out of their blundering old compilations of ancient history. It did not occur to them that a hundred kings and ten thousand merchants and priests might have left the stories of their con-

quests or contracts or liturgies, unrotted in the wet soil, imperishably preserved to be the record of commerce and empires as old and as great as those of Egypt, but far deeper covered with oblivion. But there they were, kept safe for twenty, thirty, fifty centuries, until the man should come whose mission it was to find them.

More than one such man came in the middle of the last century, but one man is pre-eminent, and typical of all the rest, Sir Austen Henry Layard. Before him one Frenchman, M. Paul Émile Botta, had made a fine dash on a palace city a dozen miles north of Nineveh, and had opened wonders such as the world had never seen before. But the man whose energy was fullest of impulse, whose enthusiasm compelled British Ambassadors and Ministers and Parliaments to do his bidding, who aroused the world to the importance of the exploration and disinterment of the monuments of Babylonia and Assyria, was the Englishman Layard.

He had a youthful passion for adventure, and slender means to gratify it. I wish you could see him as he is pictured in the volume which gives the story of his early adventures, before he had settled on his lifework of exploration. There he stands clad in his Bakhtiyari costume, the dress of a mountain tribe in Persia which asserted its independence of Teheran. It is a well-knit frame, fit to endure hardships. He stands hold-

ing the tall matchlock, the curved scimetar by his side, and the long pistol and the dagger in his belt. Above the yellow shoes and parti-woven stockings a red silk robe falls to his ankles, and over that a green silk garment reaches to his knees, and yet over that a shorter and richly embroidered coat, with open sleeves, is held close about the body by a wide silken sash woven in the brightest of red and gold, and holding the weapons attached to his waist. On his head is a low flat cap, visorless in front, but with a broad bow in place of a feather, all striped with the richest embroidery, and with a wide tassel of the same material falling far down his back. But the face, with its short beard dyed dark with henna, and its blue eyes, is not that of a warrior, but of a serious scholar or diplomatist. And he needed all the force of courage and all the arts of diplomacy for the work he had to do.

Layard's early training was in the line of preparation for his life's work. Much of his boyhood was spent in Italy, where he acquired a taste for the fine arts, and as much knowledge of them as a child could obtain who was constantly in the society of artists and connoisseurs. At about the age of sixteen he was sent to England to study the law, for which he was destined by his parents. After six years in the office of a solicitor, and in the chambers of an eminent conveyancer, — for that is the way that lawyers were educated

then, — he determined to leave England and seek a career elsewhere. He had a relative in Ceylon, who gave him hopes of securing a position there, and for Ceylon he started. A friend of his, ten years older, was bound for the same destination, both fond of adventure, and they agreed to go together, and to go as far as they could by land instead of taking the long sea journey around the Cape of Good Hope. Across Europe they passed to Constantinople, through Austria, Dalmatia, Montenegro, Albania, and Bulgaria; thence across Asia Minor to Syria and Palestine; thence to Aleppo and down the Tigris to Baghdad. It was an extraordinary and adventurous journey, often dangerous; but greater danger was to follow. Layard had learned some Turkish, and now he spent the long weeks in Baghdad in the study of Persian; his companion was quite familiar with Arabic. Before they left England they had received good advice from Sir John MacNeill, the British representative at the court of the Shah: "You must either travel as important personages, with a retinue of servants and an adequate escort, or alone, as poor men, with nothing to excite the cupidity of the people amongst whom you will have to mix. If you cannot afford to adopt the first course, you must take the latter." The latter they were forced to take.

Many a young man has the gift to acquire languages

— almost any Oriental can talk three or four — and the ability to rough it and live on the fare of the people, though barbarous; and many a man has the spirit of adventure; but this young man had one peculiar and unusual qualification that directed him to his future career. As a child, he had read the "Arabian Nights" with intense delight, with their stories centred about Baghdad. Then every book of Eastern adventure, every bit of travel in Syria, Arabia, or Persia that he could find he had eagerly devoured. It was his day and night's longing that he might visit strange lands of history and make explorations and discoveries. So wherever he was, he visited every ruin and tried to copy every inscription. If his companion would not turn aside to visit some region of renown and danger, he would go alone and join him later. As they came down the river Tigris in their boat, they passed the immense mound of Nimroud, and so impressed was Layard by it that he then, scarce twenty-three years old, resolved that some day he would search and learn what was hidden under it; but little did he imagine what wonderful monuments he was to find there only a few years later.

Without a servant, as poor men, in a caravan of fanatical and hostile Persian pilgrims returning from the shrines, just travellers trying to go by land through Persia and Afghanistan to India and Ceylon, they left

Baghdad. It was a time of unusual danger, for the British Minister had been recalled from the Persian Court, and war with England was threatened. They were taken for spies, and sent to the presence of the Shah, and forbidden to follow the route they had chosen and which had been marked out for them by the Council of the Royal Geographical Society, to report on rivers and mountains and ruins not yet explored. They were insulted and robbed, and their lives were often in danger; but at last they received from the Shah their firmans. Now they separated. His companion felt that he must go by the quickest route to his destination; but Layard had no definite date before him, and he was anxious to perform the commissions of the Geographical Society, and so he plunged alone into fresh dangers.

But there is no space to tell the rest of the story of his adventures among the Bakhtiyari, of his copying of inscriptions, of his return to Baghdad and his decision to give up the plans of life in Ceylon, and of his return from Baghdad again to Shuster and Persepolis and other ancient cities of Persia, and his exploration of the Karun River and his geographical paper on the subject, his opening of British trade, and his return to Constantinople. At Mosul he found that M. Botta was planning to explore the mounds across the Tigris that covered ancient Nineveh, and he warmly encouraged

his plans. At Constantinople he visited Sir Stratford Canning and delivered to him despatches that had been confided to his care, in view of a threatened war between Persia and Turkey. Here he was kept in the service of the British Embassy, and intrusted with important and delicate negotiations and investigations which were so highly appreciated by Sir Stratford that he kept him as his attaché.

Meanwhile M. Botta had begun his excavations of a palace of King Sargon at Khorsabad and was sending his reports and drawings to Paris. They were all sent by way of Constantinople, and, by M. Botta's generosity, were all seen by Mr. Layard. So deeply was he interested in them, and so intense was his desire to carry on excavations himself, that he secured his release from the Embassy, and also a grant of three hundred dollars from Sir Stratford's own purse, which, with what he could spare from his own money, would, he hoped, suffice to begin the work, when, if anything of value appeared, it was trusted that funds would be secured from English friends of Oriental learning. Thus, six years after leaving England, Mr. Layard, well equipped in knowledge of the people and in diplomatic experience, was ready to launch on his great career, which brought him fame and earned him the post in later years of British Ambassador at the Porte, which Sir Stratford had held, and — what is far greater —

gave to the world the larger part of its knowledge of the lost empires of Assyria and Babylonia.

With these few hundred dollars, and contributing every penny of his own income, in October of 1845, he left Constantinople without companion or servant, went by steamer to Samsoun, and then as fast as post-horses could climb or gallop over mountains and plains, he reached Mosul in twelve days.

Here at last he was fitted for his task, supplied for the accomplishment of his passion. The Arabs say: "I had a horse, but no desert; I had a desert, but no horse; now I have a desert and a horse, and shall I not ride?" His boyhood, with the artists of Italy, and learning the languages of the continent, had fitted him for his task; then his study of all the books of Eastern travel, then half a year wandering with a trained companion through Asia Minor and Syria, scarcely leaving untrod one spot hallowed by tradition, or unvisited one ruin consecrated by history, with no protection but his arms, living with the people and learning their prejudices and customs. Then an irresistible desire had brought him to the regions beyond the Euphrates, and the mystery of Assyria, Babylonia, and Chaldea had fascinated him, so that he had visited the land of Nimrod, seen the site of their old buried capitals, had been the guest in the tents of Shammar and Aneyzah Arabs, and even passed on to see the famous

forty columns of Chilminar, old Persian Persepolis, and to penetrate the mountain fastnesses where the Bakhtiyari maintained a perilous freedom. Never was man better trained by enthusiasm and experience for his task, and the late discoveries of M. Botta had inflamed his desire to surpass what his French friend had done.

His plan was not to begin excavations at Nineveh, opposite Mosul, but twenty miles south, at the great mound of Nimroud, which bore the name of the mighty hunter Nimrod. Xenophon and his Ten Thousand had seen and wondered at its pyramid. There he would be free from the army of mischievous spectators that would swarm from Mosul, had he selected the site of Nineveh, and from the constant interference of the Turkish governor. The Pasha at Mosul was a cruel scoundrel, who was robbing and killing the people as his whim or greed prompted, and had reduced the tribes of the neighborhood to a state of terror. Accordingly, Mr. Layard, who was armed with protecting letters from the British Ambassador and the Porte, thought it wise to conceal his purpose, let it be reported that he was going on a hunting expedition; and with a few tools and a supply of guns and spears, on the 8th of November, 1845, accompanied only by his cawass, the soldier attendant detailed for the protection of travellers, a servant, and one laborer, he floated down the Tigris, and in four hours reached the bourne of his long hopes.

He had the mound, he had the money, and now h would dig.

The Arabs have strange stories of this ruin. Th palace, they say, was built by Athur, the vizier Nimrod. There Abraham brake in pieces the ido worshipped by the unbelievers. Nimrod was angry an waged war on the holy patriarch. Abraham prayed God: "Deliver me, O God, from this man who wo ships stones, and boasts himself to be lord of al kings;" and God said to him, "How shall I punish him?" and the prophet answered, "To thee armies ar as nothing, and the strength and power of men like wise. Before the smallest of thy creatures will they perish." And God was pleased at the faith of his servant, and he sent a gnat that vexed Nimrod day and night, so that he built himself a room of glass in that palace that he might dwell therein and shut out the insect. But the gnat entered also, and passed by his ear into his brain, upon which it fed, and increased day by day, so that the servants of Nimrod beat his head continually with a mallet that he might have some ease from his pain; but he died after suffering these torments four hundred years. And after him the mound was named Nimroud.

It was dark when Layard and his little company reached the place. They found near by a few huts occupied by poor Arabs, who had been harried by the

Turkish Pasha. There they slept, or tried to sleep. But the explorer could not sleep. Hear him:—

"Hopes, long cherished, were now to be realized, or were to end in disappointment. Visions of palaces under ground, of gigantic monsters, of sculptured figures, and endless inscriptions, floated before me. After forming plan after plan for removing the earth and extricating these treasures, I fancied myself wandering in a maze of chambers from which I could find no outlet. Then, again, all was reburied, and I was standing on the grass-covered mound. Exhausted, I was at length sinking into sleep, when, hearing the voice of Awad, I rose from my carpet and joined him outside the tent. The day already dawned. The lofty cone and broad mound of Nimroud broke like a distant mountain on the morning sky."

Awad, his host, was a little chief among the Arabs, and was engaged to take charge of the diggers. The first morning he had six Arabs at work, and found alabaster slabs with cuneiform inscriptions. He was now sure he would succeed.

It is not necessary to give the diary of his work. To be sure, the villanous Pasha forbade him to continue, and recalled him to Mosul, but a new governor was sent from Constantinople, under whom he had no difficulty. A great palace had been found, and chamber after chamber was excavated, the walls covered with bas-reliefs and inscriptions. Then came strange, gigantic lions with human heads, that had been placed by the

old Assyrian king to guard the entrances to his court. What was the amazement of the Arabs and Turks cannot be told. First, the head was uncovered. It stood out from the earth, placid and vast. Hear Layard tell the story. He had been away to visit a neighboring chief: —

"I was returning to the mound, when I saw two Arabs urging their mares to the top of their speed. 'Hasten, O Bey,' exclaimed one of them, 'hasten to the diggers, for they have found Nimrod himself. By Allah! it is wonderful, but it is true! We have seen him with our eyes! There is no God but God!' And both joining in this pious exclamation, they galloped back to the tent."

Layard hastened to the trench, and there saw what he knew to be the head of a gigantic lion or bull, such as Botta had uncovered at Khorsabad. It was in admirable preservation. The expression was calm, yet majestic, and the outline of the features showed a freedom and knowledge of art that was scarcely to be looked for at so early a period. Says the explorer: —

"I was not surprised that the Arabs had been amazed and terrified at this apparition. It required no stretch of imagination to conjure up the most strange fancies. This gigantic head, blanched with age, thus rising from the bowels of the earth, might well have belonged to one of those fearful beings which are pictured in the traditions of the country as appearing to mortals, slowly ascending from the regions below. 'This is not the work of men's hands,' exclaimed

Sheikh Abdurrahman, who had galloped to the mound on the first news, 'but of those infidel giants of whom the Prophet, peace be with him! has said that they were higher than the tallest date-tree; this is one of the idols which Noah, peace be with him! cursed before the flood!' In this opinion all the bystanders concurred."

The Arabs have a ready explanation for every fresh discovery. When some years later Mr. Layard's assistant and successor in the work of excavation, Mr. Rassam, uncovered, at Abu-habba, a remarkable bas-relief with the figure of the seated Sun-god and three approaching worshippers, the Arab diggers rushed to him, declaring that they had found Noah and his three sons, Shem, Ham, and Japhet, and demanded a sheep to make a feast.

The report of the wonderful discovery of a royal palace, evidently older than those of Nineveh, with magnificent decorations in alabaster and cuneiform inscriptions, reached beyond Mosul to Constantinople. Sir Stratford Canning was delighted with the result of his expedition. He had a passion for discovery as well as diplomacy, and it is to him that the British Museum is indebted for the priceless marbles of Halicarnassus. He now obtained for Mr. Layard a firman, permitting him to make what excavations he wished. Then the news reached London, and the British Museum made a grant to support the work. All difficulties were now

removed. Conditions were even more favorable for him than they are now. There was then no Imperial Museum in Constantinople to which all objects found must be taken, but those that dug had the right to carry off their prizes to London or Paris.

To tell the story of the further excavations is unnecessary. It is all given in Layard's two splendid volumes, "Nineveh and its Remains," and "Babylon and Nineveh;" and the bas-reliefs, statues, bronzes, ivories, and inscriptions are magnificently reproduced in great folio volumes. From Nimroud he went back to Mosul, and there opened the two mounds opposite of Kuyunjik and Neby-Yunus, the site of old Nineveh. There more palaces and friezes were found of other kings. Then he went back to London, closing his successful campaign, more profitable if not more glorious than those of war, and published the story of his work. Its effect was marvellous. No such popular book of travels had ever appeared; for it was a story of adventure, and also of strange discovery. Mr. Layard had not suspected that he had the literary gift, but he had it in rare measure. He had gained an inner view of the heart of tribes, Moslem and Christian and semi-pagan, by his sympathy with them and his knowledge of their tongues. He had lived in their tents and huts. He had saved them from persecution by Turkish governors. Their gratitude to him was beyond words,

and he told their story with affection and enthusiasm. Then his discoveries were in the lands made historic not only by the campaigns of Xenophon and Alexander, but made almost sacred by the Bible history. These were the lands whence came the armies that fought with Israel. These were the kings whose wars are told in the Jewish records; and the annals of these kings were found in their palaces, and they gave full accounts of wars of which the Bible had given the outline. Piety and learning joined to give extraordinary interest to these discoveries and to this report of them. Mr. Layard found himself famous, and the monuments he was bringing to the British Museum were, and still are, the most extraordinary and fascinating in all its corridors.

Of course, a new grant was made in behalf of the British Museum, and of course he went back to continue and extend his researches. Now he wished to go further south, beyond Nimroud to Kalah Shergat, the yet earlier capital of Assyria; and yet further to Babylon, that he might see and test the multitude of mounds of ancient Chaldea, the real land of Nimrod, the seat of Eden, and the Tower of Babel, far more ancient than any one of the three capitals of Assyria. While he did scarce more than to visit and report on the Babylonian mounds, his diggings in Nineveh itself were of vast importance, for there he found the library of Assburbanabal, on

clay tablets, which has given us our chief knowledge of the literature and learning of the ancient East. In 1852 he returned to England to publish his "Monuments of Nineveh," and left the further exploration to his able lieutenant, Mr. Rassam, and to a noble succession of explorers who should follow, and to a no less noble line of scholars who should interpret the inscriptions and recover the history of the nations; so that we now know more exactly the history of Babylonian and Assyrian kings, and from more authentic records, and more completely the social condition and business life of the countries, than we do the history of Greece, or the life of the Greeks even of the time of Pericles, and that, too, for a period of three thousand years.

To illustrate this fact, let us take the black obelisk of Shalmaneser II., found by Layard at Nimroud. It is a column of basalt seven feet high and about two feet wide at the base, from which it narrows slightly, until near the top it is reduced by three steps. On the four sides is engraved in five rows of bas-reliefs, twenty in all, the pictured history of the royal conquests, the submission of kings, and the presentation of tribute. Above and below, and between, in two hundred and ten lines, was cut an inscription which explained the figures, and gave a full historical and, of course, contemporary and official account of the glorious events of the royal reign. Not a line was defaced; at the British Museum

it can be seen to-day as perfect as when engraved twenty-seven centuries ago. Other monuments of Shalmaneser have been found. One is a great monolith with a portrait of the king in all his fine array, and with one hundred and fifty-six lines of text. Another is a series of splendid bronze plates that covered great wooden gates, on which, in repoussé work, were pictures of the royal victories, and inscriptions explaining them. The Bible tells us of the rivalries and jealousies of Ahab and Jehu, kings of Israel, and Benhadad and Hazael, kings of Damascus. How surprising it is to find here not only the story of the successive campaigns of Shalmaneser against these same kings, the number of their chariots and soldiers, but to see pictured before us the tribute sent by Jehu. We learn that Shalmaneser reigned from 859 to 825 B. C., and we have the record of all his successive campaigns, the first twenty-six of which he led in person. There is not another country of which, before the invention of printing, we have so minute a history; and all had been lost, except the mention of a name or two, whether historical or legendary we hardly knew, until Layard and his fellow-explorers opened the mounds of Assyria.

But enough for Layard. He is only one, though the principal one, of all the explorers of the buried records of the empires of the Tigris and Euphrates. And

Babylonia and Assyria are not the only countries that history required us to explore. Greece and its neighboring states and islands have not even yet been fairly investigated. Much of Asia Minor is still a virgin field. Syria and Palestine have hardly been scratched with the spade. More has been done in Egypt, but more yet is to be done. And when we go into the further east of Persia and Old Elam, not to speak of the yet farther east of Central Asia, now just beginning to yield strange treasures to daring travellers, and ancient India and China, — how ancient we know not at all, — there is field for centuries of further research. For we must go back past empires and kingdoms and tribal conditions to the very beginning of the human race on the earth, even if so it be, to the first *Pithecanthropus* which men of science tell us was the link which connected *Homo sapiens* with the race of primitive simians. And all this, it may well be, is preserved in undecaying records just a few feet under the ground, if one only knew where to dig for it; nay, we now know where to dig for the most and best of it, and we only await the Stratford Cannings, who will give the money, and the Austen Layards, who have the enthusiasm for the work.

After Layard and Rassam, after Rawlinson and Botta, George Smith took flying trips to the site of Nineveh twice that he might gather the remaining

fragments of the great library of Asshurbanabal, and he died in the field far from home. It was he that found among Layard's tablets the Babylonian account of the Deluge, so much like that in the Bible. He was the first of a second generation who, following Rawlinson and Oppert, decipherers as well as explorers, were able to read as they found. I can only mention the names of the Englishmen Taylor and Loftus; of the Frenchmen, Place and De Sarzec; and, later, the Americans, Peters, Hilprecht, and Haynes, who have so faithfully explored the extremely archaic mound of Niffer, which I had the honor to recommend for excavation after I had visited the mounds of Southern Babylonia in the winter of 1884–85. And now the Germans, with scientific as well as commercial and political purpose, with their railroad to pass down the valley through Baghdad to the Persian Gulf, which gives them predominant influence, have sent expeditions well equipped with scholars and engineers to the choicest sites in Babylonia, to Warka, the ancient Erech, and to Babylon itself; and with Teuton thoroughness they are excavating the most famous of ancient ruins and gathering fresh treasures of archæological research. Nor have they left the land of the Hittites unexplored, for Germany claims the first rights, politically, in all Anatolia, the right of succession and possession when the Turk is expelled, and German archæological science is bound to be first on that field.

And now what have we found as the fruit of all this labor of exploration? Is it worth the labor and the expense?

Let us look first — it can be only a glance — at Egypt, for Egypt was the land first and most persistently explored. The French Government for scores of years has been at work there. Germans and Italians have explored the ruins; two English societies have for years kept expeditions in the field; and just now a Californian university sends an American Egyptologist to uncover the tombs and read the hieroglyphs of the kings. Not only are the figured monuments of Egypt published in princely folios, but its records have been translated and its lost history recovered to the world's knowledge. Instead of the bare "Pharaoh" of the Bible, a common designation for all the kings, and in place of a bare list of names and dynasties copied from Manetho, and so altered and corrupted in the copying as to be neither Greek nor Egyptian, we have, on scarab, or gravestone, or pyramid, or rock-sepulchre wall, in his own spelling, the name of almost every king from the latest time of the Ptolemies back to the first king of the first dynasty, five thousand — or was it six thousand? — years before Christ. And not their names only, but the very pictures of their wars. We see how they went up the Nile and fought the blacks of Abyssinia, and brought back the spoils of Punt.

We see them sending their squadrons into Syrian Asia, and waging a dubious battle with the Hittites before the walls of Hamath, where Rameses in his lion-guarded chariot performs prodigies of valor, and from which he returns not only to paint on sacred walls the picture of his victory, but also to inscribe a copy of the treaty of peace with the Hittite king, the earliest treaty in the preserved annals of diplomacy. Well wrought that Rameses the Great for eternal fame in the sixty years of his reign, fifteen centuries before the birth of our Lord. But what fame had been his, had not explorers and excavators and scholars dug and found and copied and translated what the sands had covered for centuries? And to-day the curious traveller stops in sight of the pyramids on the banks of the Nile, and enters the Bulaq Museum, and there he sees set up before him the very mummy of Rameses himself and of a dozen other royal personages, rifled from their tombs and displayed for your amazement and mine. There is the very Pharaoh — you can see his features, you can touch his coffin — who chased the Children of Israel out of Egypt. There are the household implements, the furniture of their homes, the jewelry their queens wore, — queens who were also sisters of the kings, as Sarah was the sister of Abraham.

Or would you know of some great revolution in Egypt? These decipherers of the inscriptions will

tell you how the Shepherd Kings overthrew the native dynasty, coming with their armies from Asia long before Rameses, and changed religion and customs; under whom Jacob and his sons found hospitable welcome, until their hated race was expelled by a stronger native dynasty that knew not Joseph. Or they will tell you of the royal reformer Khuenaten, son of a famous Eastern mother, a queen from the banks of the Euphrates. Taught by her, perhaps, a purer religion, he attempted to replace the worship of Egypt's bestial gods by the worship of the one only great God, whose symbol was the sun. But the priestly clan was too strong for him, and the succeeding Pharaohs destroyed his records and chiselled out his name where it had been cut in stone that no memory of his sacrilege might be preserved. A royal Moses there could not be. The worshipper of one God, whether king or son of Pharaoh's daughter, could bring no reformation to Egypt.

Or would you learn how Egypt ruled its subject territory? You can read the correspondence of a dozen local Egyptian governors in Palestine and Syria in the century before Moses led the Hebrew slaves out of Egypt. There is the letter of the King of Jerusalem, where Melchizedek reigned in the times of Abraham; and they tell of rebellions against the fading power of Egypt, and of the fear of the advancing Hittites. The

earliest kings, those that built the pyramids, appear before us real in their personality, emerging out of misty legend or myth, and, earlier still, even the prehistoric races that antedated the very beginning of civilization. Whence came that first dynasty? Who invented writing? Were they autochthons? Hardly. These are questions left for further explorers to answer. Probably those first messengers of civilization came from the East, perhaps from Arabia, perhaps from Babylonia, or perhaps the first Babylonians and Egyptians formed a common stock somewhere near the mouth of the Euphrates. Perhaps the Bible is right in saying that the first seat of civilized man was in Eden, and that the Euphrates was the chief river of Paradise.

Or was it from Arabia, the immemorial home of the Semitic tribes, that land of sand and mountain and fertile valley, land of changeless culture and tradition, so near the centres of civilization, and yet still the most inaccessible, the least known portion of the inhabited earth, — was it from Arabia that the wiser, stronger multitude came that first overran the valleys of both the Nile and the Euphrates, bringing to Egypt and Chaldea arts and letters? We do not know. Some future explorer must teach us. But the German Glaser has within these few years brought back from hazardous journeys a multitude of inscriptions that tell of kingdoms that fringed its southern coast and ex-

tended we know not how far into the interior in those early days when one of the queens of Sheba brought presents to Solomon, and when, earlier still, we are told there were dukes of Edom before there was any king in Israel. They say that a railroad is to be built to Mecca; Arabia is not to be always a closed land, neighbor as it is to Egypt. We shall know one of these days whether, as scholars suspect, out of Arabia and across the Straits of Bab-el-Mandeb, where, at the southern end of the Red Sea, Africa almost touches Asia, there came that mighty flood of more forceful men, bred in the deserts and hills, who, passing down the Nile, first brought history to Egypt; and whether it was this same Semitic people, as scholars suspect again, that spread resistlessly eastward to the Euphrates valley, and did an equal service in conquering and assimilating the black aborigines of these swamps and lagoons. The spade will tell us.

Or was it still further east, in the highlands of Persia, that men first learned how to write and record history? We cannot go back so far in the history of Babylonia — Professor Hilprecht dares to carry us seven thousand years before Christ — that we do not find its kings fighting against Elam. And only in the last decade of the Nineteenth century the Frenchman De Morgan has made marvellous discoveries in the Elamite lands. What a noble passion those Frenchmen have for dis-

covery! For Egypt did not Napoleon provide the most elephantine books of monuments and records that printing-presses have yet issued? And from that time to this have not Frenchmen held the primacy in excavations until, even while England holds and rules Egypt, she leaves, by special convention, the care of its monuments and their exploration to French savants? And before Layard removed a basketful of the earth that covered the palace of Shalmaneser at Nimroud, had not the Frenchman Botta disclosed the friezes and sphinxes of Sargon at Khorsabad; and in these late years is it not the Frenchman De Sarzec who has brought from Telloh to the Louvre the statuès of Chaldean kings that lived almost five thousand years ago? And so to France was given the right, for the honor and enrichment of the Louvre, to explore Persia; and De Morgan went to Susa, to Shushan, the palace of Xerxes and Darius, of Ahasuerus and Esther, in search of what was far earlier than they, for another Frenchman and his wife, M. and Mme. Dieulafoy, had already excavated the noble palace of these Persian kings. Far below the palace of Xerxes he has found vastly earlier remains. There is the column set up, if we can believe the Assyriologists who trust the chronology of Nabonidus, the last king of Babylon, — and it is not incredible, — three thousand eight hundred years before Christ, by Naram-Sin, a Babylonian king, to commemorate one of his raids into

the land of what were perhaps his stronger enemies. It is a noble composition, with archaic writing, and a stately figure of the king climbing the mountains and slaying his enemies; it shows an art that might well have developed into the best that Greece has produced. But De Morgan has only begun to scratch the surface of the mounds of Elam, and a multitude of scholars believe that out of Elam came the first civilization of Chaldea. We shall find out yet; for the record is in the earth, and only waits the man who will dig it out, and then the man who will read it.

We are tempted to go further east and recall that in India, the land where Alexander made his most distant conquests, a multitude of English scholars have been searching the ruins of old temples for the earliest memorials of the worship of Buddha. Just now they have found his birthplace and precious relics. But that takes us too far afield, and would tempt us to further excursions in Burmah and China. We must come back to Western Asia and the shores of Europe.

As has been indicated, the greatest puzzle of ancient history is that of the Hittite empire, which seems to have ruled all Asia Minor at some uncertain time, and to have extended over Syria and Palestine. No sooner had the greatest Egyptian kings, Thothmes and Rameses, ventured their armies into Asia, perhaps in vengeance on the incursions of Ionian pirates, perhaps in requital

of the tyrannies of the hated Shepherd Kings, than they learned of the Hittites on the shores of the Euphrates. Then, a century or two later, a mass of official correspondence sent by the Kings of Palestine and Syria, dug up in Egypt, reports that the Hittites had appeared as invaders from the north and beseeches military aid. But the power of Egypt had waned, and the Hittites were supreme until the Assyrians began and carried on for five centuries the uncertain war which ended in the utter overthrow of the Hittites and all their allies in a great battle at Carchemish. That great mound of Carchemish needs to be thoroughly explored. Already an English expedition has very carelessly just opened the hill and exposed, but not fairly published, some few as fine friezes as are to be found in the Assyrian capitals, with unread Hittite inscriptions, and a fine statue of the Hittite Venus; but much remains to reward the student of Oriental history and art. At Senjirli a German expedition under Von Luschan has done more and better work, handsomely published, but this was a smaller Syrian town, and less was to be expected; and yet here, and near by, were found what was not expected, steles (upright slabs or pillars) with the portraits of kings in high relief, covered over with long inscriptions in Aramaic, the oldest and longest as yet discovered anywhere in that language. It was a magnificent result of very moderate labor, — Hittite friezes,

Assyrian and Aramean inscriptions all in one little mound. But for the most part we know the art and writing of the Hittites from what we have found above ground, in their towns and fortresses in the hills, for little digging has been done. At Pterium was a principal sacred capital, and there, on a natural corridor of rock, they carved a procession of gods and kings and soldiers that excites the wonder of scholars. As I write, the announcement comes that Professor Sayce has at last discovered the secret of the Hittite hieroglyphs, and we may hope that very soon it will be possible to read them. But there is vastly more of their records yet to be disinterred.

And there remain the two lands most sacred and beloved in poetry and history, — the land of Israel and the land of Homer. It is amazing that so little search has been made to find out what is hidden under the soil of Palestine. Scholars in plenty have walked over the top of it, and have told all that is on the surface, but almost nothing has been done underground, no such excavations as in Egypt or Assyria. I do not forget that the English Palestine Exploration Fund has followed out, with trenches and tunnels, the walls of Jerusalem, nor that one or two old mounds have been partly explored. But what is this to the great work that needs to be done? There has been found on the surface the Moabite Stone, at the old capital of Dibon, a wonderful

record of early kings mentioned in the Bible. And there is the short account in the rock-cut conduit of Siloam, of the success of the workmen in the time of Hezekiah, who, beginning at the two ends, did the fine engineering feat of having their tunnels meet correctly in the solid rock. But when Jerusalem is fully explored, and the northern capitals of Bethel and Tirzah and Samaria, and a hundred other mounds that mark the site of Jewish, Israelite, Philistine, and Amorite cities, we may expect marvellous discoveries that will illumine our Holy Scriptures.

And one region yet remains to be considered, the scattered coasts and islands that owned the Greek speech, and that created the Greek civilization. It is not the Greece of the Parthenon and Pericles that we wish to discover, for that we fairly know; but the arts and the history of those earlier Greeks and Trojans that Homer tells of, the age of Agamemnon and Ulysses, of Helen and Hector and Priam, and of the yet earlier tribes that sailed the Ægean, and settled the Mediterranean islands, and sent their ships to the Egyptian coasts, and sought golden fleeces on the Euxine Sea. All about the coast of Asia Minor they lived, while that Hittite power was ruling the interior; and, intermixed with Phœnician trading-posts, they held the great islands of Crete and Cyprus and the shores of Sicily and Italy. What shall we call them? Were they Dorians,

or Heraclidæ, Achæans or Pelasgi? Were they of the same race as the mysterious Etruscans, or shall we name them simply Mycenæans, as we call the art Mycenæan that ruled the islands and coasts down to the Homeric age, and we know not how many centuries earlier, but certainly as far back as the conquering period of the Eighteenth Egyptian Dynasty of Thothmes? Their soldiers and merchants and their fine vases are pictured on the walls of Egypt, and their pottery has long been studied; but we knew little of them until Dr. Schliemann, the Greek merchant who achieved wealth in the United States, bravely opened the great ruins of Troy, in the full patriotism of his assurance that Homer's story of the Trojan war was history as well as poetry. As he found one burnt and buried city under another, — for many times was Troy destroyed, — and extended his investigations to Tiryns and other ancient cities, one volume of splendid research followed another, until the trader had compelled the unwilling scholar to confess that he must dig for both history and art. To be sure, his interpretations were quite too literal at first, but the whole world of classical scholarship has learned from him the new method of research. Splendid have been the results. If we are not sure which stratum represents the city of Priam, we do learn how the people lived, and how fine was their work in silver and gold, and how slight their knowledge of

letters. Dr. Schliemann has now a multitude of imitators. France and Germany and England and the United States each maintain a school of archæology in Athens, and each conducts careful explorations. Our American School lost to the French, for lack of money at the right time, the chance to explore Delphi, but it has carried on careful explorations at Corinth and other places. How wonderful was the discovery, not long ago, of a shipload of bronze and marble statues wrecked while being transported as spoil of war from Corinth to Rome!

But the most surprising discoveries in the realm of old Greek history and art are those that have been made in these last two or three years in Crete. Crete was a famous centre of ancient Greek legend. Jupiter was born and reared on Mount Ida. From another mountain summit in Crete the gods watched the battle on the plains of Troy. There ruled Minos, who first gave laws to men, and who at his death was sent by the gods to judge the shades as they entered the lower world. There was the famous Labyrinth, and there the Minotaur devoured his annual tale of maidens until he was slain by Theseus. Was there such a real palace of Minos as the Greek poets sung? The magnificent palace of the Cretan kings at Cnossus has been found by Mr. Evans, with its friezes, its spiral ornaments, its flounce-petticoated women, its treasuries, and

its tablets written in a script so old that it cannot yet be read, but which will be read as surely as scholarship leaves none of its riddles unsolved. The childhood of Greece, its mighty infancy, out of which it grew to be the creator and the example of all the world's culture, is even now being exposed to our view, safely kept to be recovered by the scholars of our generation.

Of interest rather to the student of the curiosities of history are the mounds and pyramids and temples built by the aborigines of America; for these tribes have had absolutely no part in creating our dominant civilization or developing its art. China and Japan are, at this late day, giving something to the world's store of beauty and utility; but the mound-builders and cliff-dwellers, the Mayas and Toltecs and Incas, have given absolutely nothing which the world cared to accept. But this does not argue that it is not worth while to learn what we can of the rude civilization of the races whom we have displaced. Their arrowheads and hatchets are in every little museum. Their mounds, sometimes shaped like serpents or tortoises or lizards, are scattered over all the central States, and many of them have been carefully explored with scanty results. The cliff-dwellers have left somewhat richer remains, more baskets and parched corn, yet nothing of artistic value. We have to go to Mexico

and Yucatan and further south to Peru, to find the majestic capitals of the Mayas and Incas, who had really reached a fair degree of such civilization as stone and copper, without iron, and the beginnings of picture symbols, without letters, could provide. Humboldt and Stephens, and Lord Kingsborough, and Squier, and Tchudi, and Charnay have made explorations and found vast and wonderful cities, some of them deserted and overgrown before Cortez and Pizarro took possession of the lands for Spain and enslaved the people. Where the city of Mexico now stands was a famous capital, from whose ruins were taken the great Calendar stone and the double statue of the god of war and the god of death. In Palenque and Uxmal, capitals of Yucatan, were immense palaces and temples, with the weird ornamentation of Mayan imagination; and equal wonders exist in the high uplands where the Incas ruled Peru. Even their barbaric art and their unrecorded history must be recovered, to satisfy the curiosity of the more fortunate races whose boasted Christianity visited on them nothing better than cruel slaughter. At least we can give them museums and publish magnificent pictures of their ruins.

So we may bless the ashes and sand that seemed to destroy and bury the monuments of the mighty empires of the ancient world, but which have kindly covered and preserved them, just as we put our treasures away in some safety-vault while absent on

a long journey. The fire burned the upper wooden walls of the city, and it fell in ruins, but under those ruins, covered by that ashes, were preserved for two thousand, three thousand, five thousand years uninjured, the choicest sculpture and the most precious records of ancient nations, — retained beyond the reach of vandal hands, until scholarship had grown wise enough to ask questions of forgotten history, and had sent Layard and Schliemann and De Sarzec and Evans and a hundred other men to dig with their competitive spades. But in all the long list of enthusiasts not one deserves a higher honor or has reaped a richer harvest than Sir Henry Layard.

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MICHAEL FARADAY.

1791–1867.

ELECTRICITY AND MAGNETISM.

MICHAEL FARADAY.

ELECTRICITY AND MAGNETISM.

By EDWIN J. HOUSTON, PH.D.

"No man is born into the world whose work
Is not born with him. There is always work,
And tools to work withal, for those who will."

LOWELL.

A MAN was born into the world, on the 22d of September, 1791, whose work was born with him, and who did this work so well that he became one of its greatest benefactors. Indeed, much of the marvellous advance made in the electric arts and sciences, during the last half-century, can be directly traced to this work.

It was in Newington Butts, in London, England, that the man-child first opened his eyes on the wonders of the physical world around him. To those eyes, in after years, were given a far deeper insight into the mysteries of nature than often falls to the lot of man. This man-child was Michael Faraday, who has been justly styled, by those best capable of judging him, "The Prince of Experimental Philosophers."

The precocity so common in the childhood of men of genius was apparently absent in the case of young Faraday. The growing boy played marbles, and worried through a scant education in reading, writing, and arithmetic, unnoticed, and most probably, for the greater part, severely left alone, as commonly falls to the lot of nearly all boys, whether ordinary or extraordinary. At the early age of thirteen, he was taken from school and placed on trial as errand-boy in the book-shop of George Ribeau, in London. After a year at this work, he was taken as an apprentice to the book-binding trade, by the same employer, who, on account of his faithful services, remitted the customary premium At this work he spent some eight years of his life.

But far be it from us even to hint at the absence of genius in the young child. Genius is not an acquired gift. It is born in the individual. Apart from the marvellous achievements of the man, a mere glance at the magnificent head, with its high intellectual forehead, the firm lips, the intelligent inquiring eyes, and the bright face, as seen in existing pictures, assures us that they portray an unusual individuality, incompatible with even a suspicion of belonging to an ordinary man. Doubtless the growing child did give early promise of his future greatness. Doubtless he was a formidable member of that terrible class of inquiring

youngsters who demand the why and the wherefore of all around them, and refuse to accept the unsatisfactory belief of their fathers that things "are because they are." In its self-complacency, the busy world is too apt to fail to notice unusual abilities in children,—abilities that perhaps too often remain undeveloped from lack of opportunities. But whether young Faraday did or did not, at an early age, display any unusual promise of his life-work, all his biographers appear to agree that he could not be regarded as a precocious child.

Faraday disclaimed the idea that his childhood was distinguished by any precocity. "Do not suppose that I was a very deep thinker, or was marked as a precocious person," says Faraday, when alluding to his early life. "I was a very lively, imaginative person, and could believe in the 'Arabian Nights' as easily as the 'Encyclopædia,' but facts were important to me, and saved me. I could trust a fact and always cross-examined an assertion. So when I questioned Mrs. Marcet's book [he is alluding to her "Conversations on Chemistry"], by such little experiments as I could find means to perform, and found it true to the facts as I could understand them, I felt that I had got hold of an anchor in chemical knowledge, and clung fast to it."

But while there may be a question as to the exist-

ence of precocity in the young lad, there does not appear to be any reason for believing that his unusual abilities were the result of direct heredity. His father, an ordinary journeyman blacksmith, never exhibited any special intellectual ability, though possibly poverty and poor health may have been responsible for this failure. His mother, too, it appears, was of but ordinary mentality.

The environment of those early years — that is, from 1804 to 1813, while in the book-binding business — was far from calculated to develop any marked abilities inherent in our young philosopher. What would seem less calculated to inspire a wish to obtain a deeper insight into the mysteries of the physical world than the trade of book-binding, especially in the case of a boy whose scholastic education ceased at fourteen years and was limited to the mere rudiments of learning? But, fortunately for the world, the inquiring spirit of the lad led him to examine the inside of the books he bound, and thus, by familiarizing himself with their contents, he received the inspiration that good writing is always ready to bestow on those who properly read it. Two books, he afterwards informs us, proved of especial benefit; namely, "Marcet's Conversations on Chemistry," already referred to, and the "Encyclopædia Britannica." To the former he attributes his grounding in chemistry, and to the latter his first ideas in

electricity, in both of which studies he excelled in after years. As we have seen, even at this early age he followed the true plan for the physical investigator, cross-questioned all statements, only admitting those to the dignity of facts whose truth he had established by careful experimentation.

But our future experimental philosopher has not as yet fairly started on the beginnings of his life-work The possibilities of the book-binding trade were too limited to permit much real progress. A circumstance occurred in the spring of 1812 that shaped his entire after-life. This was the opportunity then afforded him to attend four of the last lectures delivered at the Royal Institution, by the great Sir Humphry Davy. Faraday took copious notes of these lectures, carefully wrote them out, and bound them in a small quarto volume. It was this volume, which he afterwards sent to Davy, that resulted in his receiving, on March 1, 1813, the appointment of laboratory assistant in the Royal Institution. His pay for this work was twenty-five shillings a week, with a lodging on the top floor of the Institute, a very fair compensation for the times.

Very congenial were the duties of the young assistant. They were to keep clean the beloved apparatus of the lecturers, and to assist them in their demonstrations. The new world thus opened was full of bright promise. He keenly felt the deficiencies of his early

education, and did his best to extend his learning, so that he might be able to make the most of his opportunities. But what he perhaps appreciated the most was the inspiration he received from the great teacher Davy, who was then Professor of Chemistry and Director of the Laboratory of the Royal Institution; for Faraday assisted at Davy's lectures, and in an humble way even aided his investigations, sharing the dangers arising from the explosion of the unstable substance, chloride of nitrogen, that Davy was then investigating. Faraday has repeatedly acknowledged the debt owed to the inspiration of this teacher. Davy also, in later life generously recognized, in his former assistant, a philosopher greater than himself. As the renowned astronomer, Tycho Brahe, discovered in one of his pupils, John Kepler, an astronomer greater than the master, and as Bergman, the Swedish chemist, in a similar manner, discovered the greater chemist Scheele, so when Davy, in after years, was asked what he regarded as his greatest discovery, he briefly replied, "Michael Faraday."

The task of the scientific historian, who endeavors honestly to record the progress of research, and to trace the influence of the work of some individual on the times in which he lived, is by no means an easy one; for, in scientific work one discovery frequently passes so insensibly into another that it is often difficult to

know just where one stops and the other begins, and much difficulty constantly arises as to whom the credit should be given, when, as is too often the case, these discoveries are made by different individuals. It is only when some great discovery stands alone, like a giant mountain peak against the clear sky, that it is comparatively easy to determine the extent and character of its influence on other discoveries, and justly to give the credit to whom the credit is due. Such discoveries form ready points of reference in the intellectual horizon, and mark distinct eras in the world's progress. This is true of all work in the domain of physical science, but it is especially true in that of electricity and magnetism, in which Faraday was pre-eminent. The scope of each of these sciences is so extended, the number of workers so great, and the applications to the practical arts so nearly innumerable, that it is often by no means an easy task correctly to trace their proper growth and development.

Faraday's investigations covered vast fields in the domain of chemistry, electricity, and magnetism. It is to the last two only that reference will here be made. Faraday's life-work in electricity and magnetism began practically in 1831, when he made his immortal discovery of the direct production of electricity from magnetism. His best work in electricity and magnetism was accomplished between 1831 and 1856, ex-

tending, therefore, over a period of some twenty-five years, although it is not denied that good work was done since 1856. Consequently, it was at so comparatively recent a date that most of Faraday's work was done that some of the world's distinguished electricians yet live who began their studies during the latter years of Faraday's life. The difficulties of tracing, at least to some extent, the influence that Faraday's masterly investigations have had on the present condition of the electrical arts and sciences will, therefore, be considerably lessened.

The extent of Faraday's researches and discoveries in magnetism and electricity was so great that it will be impossible, in the necessarily limited space of a brief biographical sketch, to notice any but the more prominent. Nor will any attempt be made, except where the nature of the research or discovery appears to render it advisable, to follow any strict chronological order; for, our inquiry here is not so much directed to a mere matter of history as to the influence which the investigation or discovery exerted on the life and civilization of the age in which we live.

There is a single discovery of Faraday that stands out sharply amidst all his other discoveries, great as they were, and is so important in its far-reaching results that it alone would have stamped him as a philosophical investigator of the highest merits, had

he never done anything else. This was his discovery of the means for developing electricity directly from magnetism. It was made on the 29th of August, 1831, and should be regarded as inspired by the great discovery made by Oersted in 1820, of the relations existing between the voltaic pile and electro-magnetism. It was in the same year that Ampère had conducted that memorable investigation as to the mutual attractions and repulsions between circuits through which electric currents are flowing, which resulted in a theory of electro-magnetism, and finally led to the production of the electro-magnet itself. Ampère had shown that a coil of wire, or helix, through which an electric current is passing, acted practically as a magnet, and Arago had magnetized an iron bar by placing it within such a helix.

In common with the other scientific men of his time, Faraday believed that since the flow of an electric current invariably produced magnetism, so magnetism should, in its turn, be capable of producing electricity. Many investigators before Faraday's time had endeavored to solve this problem, but it was reserved to Faraday alone to be successful. Since success in this investigation resulted from some experiments he made while endeavoring to obtain inductive action on a quiescent circuit from a neighboring circuit through which an electric current was flowing, we will first briefly examine

this experiment. All his experiments in this direction were at first unsuccessful. He passed an electric current through a circuit, which was located close to another circuit containing a galvanometer, — a device for showing the presence of an electric current and measuring its strength, — but failed to obtain any result. He looked for such results only when the current had been fully established in the active circuit. Undismayed by failure, he reasoned that probably effects were present, but that they were too small to be observed owing to the feeble inducing current employed. He therefore increased the strength of the current in the active wire; but still with no results.

Again and again he interrogates nature, but unsuccessfully. At last he notices that there is a slight movement of the galvanometer needle at the moment of making and breaking the circuit. Carefully repeating his experiments in the light of this observation, he discovers the important fact that it is only at the moment a current is increasing or decreasing in strength — at the moment of making or breaking a circuit — that the active circuit is capable of producing a current in a neighboring inactive circuit by induction. This was an important discovery, and in the light of his after-knowledge was correctly regarded as a solution of the production of electricity from magnetism.

Observing that the galvanometer needle momentarily swings in one direction on making the circuit, and in the opposite direction on breaking it, he establishes the fact that the current induced on making flows in the opposite direction to the inducing current, and that induced on breaking flows in the same direction as the inducing current.

Having thus established the fact of current induction, he makes the step of substituting magnets for active circuits; a simple step in the light of our present knowledge, but a giant stride at that time. Remembering that current induction, or, as he called it, voltaic current induction, takes place only while some effect produced by the current is either increasing or decreasing, he moves coils of insulated wire towards or from magnet poles, or magnet poles towards or from coils of wire, and shows that electric currents are generated in the coils while either the coils or the magnets are in motion, but cease to be produced as soon as the motion ceases. Moreover, these magnetically induced currents differ in no respects from other currents, — for example, those produced by the voltaic pile, — since, like the latter, they produce sparks, magnetize bars of steel, or deflect the needle of a galvanometer. In this manner Faraday solved the great problem. He had produced electricity directly from magnetism!

With, perhaps, the single exception of the discovery by Oersted, in 1820, of the invariable relation existing between an electric current and magnetism, this discovery of Faraday may be justly regarded as the greatest in this domain of physical science. These two master minds in scientific research wonderfully complemented each other. Oersted showed that an electric current is invariably attended by magnetic effects; Faraday showed that magnetic changes are invariably attended by electric currents. Before these discoveries, electricity and magnetism were necessarily regarded as separate branches of physical science, and were studied apart as separate phenomena. Now, however, they must be regarded as co-existing phenomena. The ignorance of the scientific world had unwittingly divorced what nature had joined together.

In view of the great importance of Faraday's discovery, we shall be justified in inquiring, though somewhat briefly, into some of the apparatus employed in this historic research. Note its extreme simplicity. In one of his first successful experiments he wraps a coil of insulated wire around the soft iron bar that forms the armature or keeper of a permanent magnet of the horse-shoe type, and connects the ends of this coil to a galvanometer. He discovers that whenever the armature is placed against the magnet poles, and is therefore being rendered magnetic by contact therewith,

the deflection of the needle of the galvanometer shows that the coiled wire on the armature is traversed by a current of electricity; that whenever the armature is removed from the magnet poles, and is therefore losing its magnetism, the needle of the galvanometer is again deflected, but now in the opposite direction, showing that an electric current is again flowing through the coiled wire on the armature, but reversed in direction. He notices, too, that these effects take place only while changes are going on in the strength of the magnetism in the armature, or when magnetic flux is passing through the coils; for, the galvanometer needle comes to rest, and remains at rest as long as the contact between the armature and the poles remains unbroken.

In another experiment he employs a simple hollow coil, or helix, of insulated wire whose ends are connected with a galvanometer. On suddenly thrusting one end of a straight cylindrical magnet into the axis of the helix, the deflection of the galvanometer needle showed the presence of an electric current in the helix. The magnet being left in the helix, the galvanometer needle came to rest, thus showing the absence of current. When the bar magnet was suddenly withdrawn from the helix, the galvanometer needle was again deflected, but now in the opposite direction, showing that the direction of the current in the helix had been reversed.

The preceding are but some of the results that Faraday obtained by means of his experimental researches in the direct production of electricity from magnetism. Let us now briefly examine just what he was doing, and the means whereby he obtained electric currents from magnetism. We will consider this question from the views of the present time, rather than from those of Faraday, although the difference between the two are in most respects immaterial.

Faraday knew that the space or region around a magnet is permeated or traversed by what he called magnetic curves, or lines of magnetic force. These lines are still called "lines of magnetic force," or by some "magnetic streamings," "magnetic flux," or simply "magnetism." They are invisible, though their presence is readily manifested by means of iron filings. They are present in every magnet, and although we do not know in what direction they move, yet in order to speak definitely about them, it is agreed to assume that they pass out of every magnet at its north-seeking pole (or the pole which would point to the magnetic north, were the magnet free to move as a needle), and, after having traversed the space surrounding the magnet, re-enter at its south-seeking pole, thus completing what is called the magnetic circuit. Any space traversed by lines of magnetic force is called a magnetic field.

But it is not only a magnet that is thus surrounded

by lines of magnetic force, or by ether streamings. The same is true of any conductor through which an electric current is flowing, and their presence may be shown by means of iron filings. If an active conductor — a conductor conveying an electric current, as, for example, a copper wire — be passed vertically through a piece of card-board, or a glass plate, iron filings dusted on the card or plate will arrange themselves in concentric circles around the axis of the wire. It requires an expenditure of energy both to set up and to maintain these lines of force. It is the interaction of their lines of force that causes the attractions and repulsions in active movable conductors. These lines of magnetic force act on magnetic needles like other lines of magnetic force and tend to set movable magnetic needles at right angles to the conducting wire.

The setting up of an electric current in a conducting wire is, therefore, equivalent to the setting up of concentric magnetic whirls around the axis of the wire, and anything that can do this will produce an electric current. For example, if an inactive conducting wire is moved through a magnetic field, it will have concentric circular whirls set up around it; or, in other words, it will have a current generated in it as a result of such motion. But to set up these whirls it is not enough that the conducting wire be moved along the lines of force in the field. In such a case no whirls are produced

around the conductor. The conductor must be moved so as to cut or pass through the lines of magnetic force. Just what the mechanism is by means of which the cutting of the lines of force by the conductor produces the circular magnetic whirls around it, no man knows any more than he knows just what electricity is; but this much we do know, — that to produce the circular whirls or currents in a previously inactive conductor, the lines of force of some already existing magnetic field must be caused to pass through the conductor, and that the strength of the current so produced is proportional to the number of lines of magnetic force cut in a given time, say, per second; or, in other words, is directly proportional to the strength of the magnetic field, and to the velocity and length of the moving conductor.

Or, briefly recapitulating: Oersted showed that an electric current, passed through a conducting circuit, sets up concentric circular whirls around its axis; that is, an electric current invariably produces magnetism; Faraday showed, that if the lines of magnetic force, or magnetism, be caused to cut or pass through an inactive conductor, concentric circular whirls will be set up around the conductor; that is, lines of magnetic force passed across a conductor invariably set up an electric current in that conductor.

The wonderful completeness of Faraday's researches into the production of electricity from magnetism may

be inferred from the fact that all the forms of magneto-electric induction known to-day — namely, self-induction, or the induction of an active circuit on itself; mutual induction, or the induction of an active circuit on a neighboring circuit; and electro-magnetic induction, and magneto-electric induction, or the induction produced in conductors through which the magnetic flux from electro and permanent magnets respectively is caused to pass — were discovered and investigated by him. Nor were these investigations carried on in the haphazard, blundering, groping manner that unfortunately too often characterizes the explorer in a strange country; on the contrary, they were singularly clear and direct, showing how complete the mastery the great investigator had over the subject he was studying. It is true that repeated failures frequently met him, but despite discouragements and disappointments he continued until he had entirely traversed the length and breadth of the unknown region he was the first to explore.

Let us now briefly examine Faraday's many remaining discoveries and inventions. Though none of these were equal to his great discovery, yet many were exceedingly valuable. Some were almost immediately utilized; some waited many years for utilization; and some have never yet been utilized. We must avoid, however. falling into the common mistake of holding

in little esteem those parts of Faraday's work that did not immediately result either in the production of practical apparatus, or in valuable applications in the arts and sciences, or those which have not even yet proved fruitful. Some discoveries and devices are so far ahead of the times in which they are produced that several lifetimes often pass before the world is ready to utilize them. Like immature or unripe fruit, they are apt to die an untimely death, and it sometimes curiously happens that, several generations after their birth, a subsequent inventor or discoverer, in honest ignorance of their prior existence, offers them to the world as absolutely new. The times being ripe, they pass into immediate and extended public use, so that the later inventor is given all the credit of an original discovery, and the true first and original inventor remains unrecognized.

We will first examine Faraday's discovery of the relations existing between light and magnetism. Though the discovery has not as yet borne fruit in any direct practical application, yet it has proved of immense value from a theoretical standpoint. In this investigation Faraday proved that light-vibrations are rotated by the action of a magnetic field. He employed the light of an ordinary Argand lamp, and polarized it by reflection from a glass surface. He caused this polarized light to pass through a plate of heavy glass made

from a boro-silicate of lead. Under ordinary circumstances this substance exerted no unusual action on light, but when it was placed between the poles of a powerful electro-magnet, and the light was passed through it in the same direction as the magnetic flux, the plane of polarization of the light was rotated in a certain direction.

Faraday discovered that other solid substances besides glass exert a similar action on a beam of polarized light. Even opaque solids like iron possess this property. Kerr has proved that a beam of light passed through an extremely thin plate of highly magnetic iron has its plane of polarization slightly rotated. Faraday showed that the power of rotating a beam of polarized light is also possessed by some liquids. But what is most interesting, in both solids and liquids, is that the direction of the rotation of the light depends on the direction in which the magnetism is passing, and can, therefore, be changed by changing the polarity of the electro-magnet.

Faraday did not seem to thoroughly understand this phenomenon. He spoke as if he thought the lines of magnetic force had been rendered luminous by the light rays; for, he announced his discovery in a paper entitled, "Magnetization of Light and the Illumination of the Lines of Magnetic Force." Indeed, this discovery was so far ahead of the times that it was not until

a later date that the results were more fully developed, first by Kelvin, and subsequently by Clerk Maxwell. In 1865, two years before Faraday's death, Maxwell proposed the electro-magnetic theory of light, showing that light is an electro-magnetic disturbance. He pointed out that optical as well as electro-magnetic phenomena required a medium for their propagation, and that the properties of this medium appeared to be the same for both. Moreover, the rate at which light travels is known by actual measurement; the rate at which electro-magnetic waves are propagated can be calculated from electrical measurements, and these two velocities exactly agree. Faraday's original experiment as to the relation between light and magnetism is thus again experimentally demonstrated; and. Maxwell's electro-magnetic theory of light now resting on experimental fact, optics becomes a branch of electricity. A curious consequence was pointed out by Maxwell as a result of his theory; namely, that a necessary relation exists between opacity and conductivity, since, as he showed, electro-magnetic disturbances could not be propagated in substances which are conductors of electricity. In other words, if light is an electro-magnetic disturbance, all conducting substances must be opaque, and all good insulators transparent. This we know to be the fact: metallic substances, the best of conductors, are opaque, while glass and crystals are transparent.

Even such apparent exceptions as vulcanite, an excellent insulator, fall into the law, since, as Graham Bell has recently shown, this substance is remarkably transparent to certain kinds of radiant energy.

In 1778, Brugmans of Leyden noticed that if a piece of bismuth was held near either pole of a strong magnet, repulsion occurred. Other observers noticed the same effect in the case of antimony. These facts appear to have been unknown to Faraday, who, in 1845, by employing powerful electro-magnets rediscovered them, and in addition showed that practically all substances possess the power of being attracted or repelled, when placed between the poles of sufficiently powerful magnets. By placing slender needles of the substances experimented on between the poles of powerful horseshoe magnets, he found that they were all either attracted like iron, coming to rest with their greatest length extending between the poles; or, like bismuth, were apparently repelled by the poles, coming to rest at right angles to the position assumed by iron. He regarded the first class of substances as attracted, and the second class as repelled, and called them respectively paramagnetic and diamagnetic substances. In other words, paramagnetic substances, like iron, came to rest axially (extending from pole to pole), and diamagnetic substances, like bismuth, equatorially (extending transversely between the poles). He reserved the term

magnetic substances to cover the phenomena of both para- and dia-magnetism. He communicated the results of this investigation to the Royal Society in a paper on the "Magnetic Condition of All Matter," on Dec. 18, 1845.

The properties of paramagnetism and diamagnetism are not possessed by solids only, but exist also in liquids and gases. When experimenting with liquids, they were placed in suitable glass vessels, such as watch crystals, supported on pole pieces properly shaped to receive them. Under these circumstances paramagnetic liquids, such as salts of iron or cobalt dissolved in water, underwent curious contortions in shape, the tendency being to arrange the greater part of their mass in the direction in which the flux passed; namely, directly between the poles. Diamagnetic liquids, such as solutions of salts of bismuth and antimony, in a similar manner, arranged the greater part of their mass in positions at right angles to this direction, or equatorially.

At first Faraday attributed the repulsion of diamagnetic substances to a polarity, separate and distinct from ordinary magnetic polarity, for which he proposed the name, diamagnetic polarity. He believed that when a diamagnetic substance is brought near to the north pole of a magnet, a north pole was developed in its approached end, and that therefore repulsion occurred. He afterwards rejected this view, though it has been

subsequently adopted by Weber and Tyndall, the latter of whom conducted an extended series of experiments on the subject. The majority of physicists, however, at the present time, do not believe in the existence of a diamagnetic polarity. They point out that the apparent repulsion of diamagnetic substances is due to the fact that they are less paramagnetic than the oxygen of the air in which they are suspended.

During this investigation Faraday observed some phenomena that led him to a belief in the existence of another form of force, distinct from either para- or diamagnetic force, which he called the magne-crystallic force. He had been experimenting with some slender needles of bismuth, suspending them horizontally between the poles of an electro-magnet. Taking a few of these cylinders at random from a greater number, he was much perplexed to find that they did not all come to rest equatorially, as well-behaved bars of diamagnetic bismuth should do, though, if subjected to the action of a single magnetic pole, they did show this diamagnetic character by their marked repulsion. After much experimentation, he ascribed this phenomenon to the crystalline condition of the cylinder. By experimenting with carefully selected groups of crystals of bismuth, he believed he could trace the cause of the phenomenon to the action of a force which he called the magne-crystallic force.

Extended experiments carried on by Plücker on the influence of magnetism on crystalline substances led him to believe that a close relation exists between the ultimate forms of the particles of matter and their magnetic behavior. This subject is as yet far from being fully understood.

There was another series of investigations made by Faraday between the years 1831 and 1840, that has been wonderfully utilized, and may properly be ranked among his great discoveries. We allude to his researches on the laws which govern the chemical decomposition of compound substances by electricity. The fact that the electric current possesses the power of decomposing compound substances was known as early as 1800, when Carlisle and Nicholson separated water into its constituent elements, by the passage of a voltaic current. Davy, too, in 1806, had delivered his celebrated discourse "On Some Chemical Agencies of Electricity," and in 1807, had announced his great discovery of the decomposition of the fixed alkalies.

Faraday showed that the amount of chemical action produced by electricity is fixed and definite. In order to be able to measure the amount of this action, he invented an instrument which he called a voltameter, or a volta-electrometer. It consisted of a simple device for measuring the amount of hydrogen and oxygen gases liberated by the passage of an electric current

through water acidulated with sulphuric acid. He showed, by numerous experiments, that the decomposition effected is invariably proportional to the amount of electricity passing; that variations in the size of the electrodes, in the pressure, or in the degree of dilution of the electrolyte, had nothing to do with the result, and that therefore a voltameter could be employed to determine the amount of electricity passing in a given circuit. He also demonstrated that when a current is passed through different electrolytes (compound substances decomposed by the passage of electricity), the amount of the decompositions are chemically equivalent to each other.

The extent of Faraday's work in the electro-chemical field may be judged by considering some of the terms he proposed for its phenomena, most of which, with some trifling exceptions, are still in use. It was he who gave the name electrolysis to decomposition by the electric current; he also proposed to call the wires, or conductors connected with the battery, or other electric source, the electrodes, naming that one which was connected with the positive terminal, the anode, and that one connected with the negative terminal, the cathode. He called the separate atoms or groups of atoms into which bodies undergoing electrolysis are separated, the radicals, or ions, and named the electro-positive ions, which appear at the cathode, the kathions, and the

electro-negative radicals which appear at the anode, the anions.

There were many other researches made by Faraday, such as his experiments on disruptive electric discharges, his investigations on the electric eel, his many researches on the phenomena both of frictional electricity and of the voltaic pile, his investigations on the contact and chemical theories of the voltaic pile, and those on chemical decomposition by frictional electricity; these are but some of the more important of them. Those we have already discussed will, however, amply suffice to show the value of his work. Rather than take up any others, let us inquire what influence, if any, the various groups of discoveries we have already discussed have exerted on the electric arts and sciences in our present time. What practical results have attended these discoveries? What actual, useful, commercial machines have been based on them? What useful processes or industries have grown out of them?

And, first, as to actual commercial machines. These researches not only led to the production of dynamo-electric machines, but, in point of fact, Faraday actually produced the first dynamo. A dynamo-electric machine, as is well known, is a machine by means of which mechanical energy is converted into electrical energy, by causing conductors to cut through, or be cut through by, lines of magnetic force; or, briefly, it is a machine

by means of which electricity is readily obtained from magnetism.

Faraday's invention of the first dynamo is interesting because at the same time he made the invention he solved a problem which up to his time had been the despair of the ablest physicists and mathematicians. This was the phenomenon of Arago's rotating disc. It was briefly as follows: If a copper disc be rotated above a magnet, the needle tends to follow the plate in its rotation; or, if a copper plate be placed at rest above or below an oscillating magnet, it tends to check its oscillations and bring the needle quickly to rest. Faraday investigated these phenomena and soon discovered that a copper disc rotated below two magnet poles had electric currents generated in it, which flowed radially through the disc between its circumference and centre. By placing one end of a conducting circuit on the axis of the disc, and the other end on its circumference, he succeeded in drawing off a continuous electric current generated from magnetism, and thus produced the first dynamo. This was in 1831. Faraday produced many other dynamos besides this simple disc machine.

Although the disc dynamo in its original form was impracticable as a commercial machine, yet it was not only the forerunner of the dynamo, but was, in point of fact, the first machine ever produced that is entitled to be called a dynamo. He generously left to those who

might come after him the opportunity to avail themselves of his wonderful discovery. "I have rather, however," he says, "been desirous of discovering new facts and new relations dependent on magneto-electric induction than of exalting the force of those already obtained, being assured that the latter would find their development hereafter." How profoundly prophetic! Could the illustrious investigator see the hundreds of thousands of dynamos that are to-day in all parts of the world engaged in converting millions of horse-power of mechanical energy into electric energy, he would appreciate how marvellously his successors have "exalted the force" of some of the effects he had so ably shown the world how to obtain.

Faraday lived to see his infant dynamo, the first of its kind, developed into a machine not only sufficiently powerful to maintain electric arc lights, but also into a form sufficiently practicable to be continuously engaged in producing such light, in one of the lighthouses on the English coast. Holmes produced such a machine in 1862, or some years before Faraday's death. It was installed under the care of the Trinity House, at the Dungeness Lighthouse, in June, 1862, and continued in use for about ten years. When this machine was shown to Faraday by its inventor, the veteran philosopher remarked, "I gave you a baby, and you bring me a giant."

The alternating-current transformer is another gift of Faraday to the commercial world. As is well known, this instrument is a device for raising or lowering electric pressure. The name is derived from the fact that the instrument is capable of taking in at one pressure the electric energy supplied to it, and giving it out at another pressure, thus transforming it. Faraday produced the first transformer during his investigations on voltaic-current induction. The modern alternating-current transformer, though differing markedly in minor details from Faraday's primitive instrument, yet in general details is essentially identical with it. The enormous use of both step-up and step-down transformers — transformers which respectively induce currents of higher and of lower electromotive forces in their secondary coils than are passed through their primaries — shows the great practical value of this invention. The wonderful growth of the commercial applications of alternating currents during the past few decades would have been impossible without the use of the alternating-current transformer.

It is an interesting fact that it was not in the form of the step-down alternating-current transformer that Faraday's discovery of voltaic-current induction was first utilized, but in the form of a step-up transformer, or what was then ordinarily called an induction coil. As early as 1842, Masson and Bréguet constructed an

induction coil by means of which minute sparks could be obtained from the secondary, in vacuo. In 1851, Ruhmkorff constructed an induction coil so greatly improved, by the careful insulation of its secondary circuit, that he could obtain from it torrents of long sparks in ordinary air. The Ruhmkorff induction coil has in late years been greatly improved both by Tesla and Elihu Thomson, who, separately and independently of each other, have produced excellent forms of high-frequency induction coils.

Induction coils have long been in use for purposes of research, and in later years have been employed in the production both of the Röntgen rays used in the photography of the invisible, and the electro-magnetic waves used in wireless telegraphy.

Röntgen's discovery was published in 1895. It was rendered possible by the prior work of Geissler and Crookes on the luminous phenomena produced by the passage of electric discharges through high vacua in glass tubes. Röntgen discovered that the invisible rays, or radiation, emitted from certain parts of a high-vacuum tube, when high-tension discharges from induction coils were passing, possessed the curious property of traversing certain opaque substances as readily as light does glass or water. He also discovered that these rays were capable of exciting fluorescence in some substances, — that is, of causing them to emit light and be-

come luminous, — and that these rays, like the rays of light, were capable of affecting a photographic plate. From these properties two curious possibilities arose; namely, to see through opaque bodies, and to photograph the invisible. Röntgen called these rays X, or unknown rays. They are now almost invariably called by the name of their distinguished discoverer.

Let us briefly investigate how it is possible both to see and to photograph the invisible. Shortly after Röntgen's discovery, Edison, with that wonderful power of finding practical applications for nearly all discoveries, had invented the fluoroscope, — a screen covered with a peculiar chemical substance that becomes luminous when exposed to the Röntgen rays. Suppose, now, between the rays and such a screen be interposed a substance opaque to ordinary light, as, for example, the human hand. The tissues of the hand, such as the flesh and the blood, permit the rays to readily pass through them, but the bones are opaque to the rays, and, therefore, oppose their passage; consequently, the screen, instead of being uniformly illumined, will show shadows of the bones, so that, to an eye examining the screen, it will seem as though it were looking through the flesh and blood directly at the bones. In a similar manner, if a photographic plate be employed instead of the screen, a distinct photographic picture will be obtained.

Both the fluoroscope and the photographic camera have proved an invaluable aid to the surgeon, who can now look directly through the human body and examine its internal organs, and so be able to locate such foreign bodies as bullets and needles in its various parts, or make correct diagnoses of fractures or dislocations of the bones, or even examine the action of such organs as the liver and heart.

About 1886, Hertz discovered that if a small Leyden jar is discharged through a short and simple circuit, provided with a spark-gap of suitable length, a series of electro-magnetic waves are set up, which, moving through space in all directions, are capable of exciting in a similar circuit effects that can be readily recognized, although the two circuits are at fairly considerable distances apart. Here we have a simple basic experiment in wireless telegraphy, which, briefly considered, consists of means whereby oscillations or waves, set up in free space by means of disruptive discharges, are caused to traverse space and produce various effects in suitably constructed receptive devices that are operated by the waves as they impinge on them.

At first a doubt was expressed by eminent scientific men as to the practicability of successfully transmitting wireless messages through long distances, since these waves, travelling in all directions, would soon become too attenuated to produce intelligible signals; but

when it was shown, from theoretical considerations, that these waves when traversing great distances are practically confined to the space between the earth's surface and the upper rarified strata of the atmosphere, the possibility of long-distance wireless telegraphic transmission was recognized. To increase the distance, it was only necessary either to increase the energy of the waves at the transmitting station, or to increase the delicacy of the receiving instruments, or both.

It has been but a short time since both the scientific and the financial worlds were astounded by the actual transmission of intelligible wireless signals across the Atlantic, and the name of Marconi will go down to posterity as the one who first accomplished this great feat.

The principal limit to the distance of transmission lies in the delicacy of the receiving instruments. The most sensitive are those in which a telephone receiver forms a part of the receiving apparatus. The almost incredibly small amount of electric energy required to produce intelligible speech in an ordinary Bell telephone receiver nearly passes belief. The work done in lifting such an instrument from its hook to the ear of the listener, would, if converted into electric energy, be sufficient to maintain an audible sound in a telephone for 240,000 years! Even extremely attenuated waves may therefore produce audible signals in such a receiver.

The electric motor was another gift of Faraday to commercial science, although in this case there are others who can, perhaps, justly claim to share the honor with him. Faraday's early electric motor consisted essentially in a device whereby a movable conductor, suspended so as to be capable of rotation around a magnet pole, was caused to rotate by the mutual interaction of the magnetic fields of the active conductor and the magnet. The magnet, which consisted of a bar of hardened steel, was fixed in a cork stopper, which completely closed the end of an upright glass tube. A small quantity of mercury was placed in the lower end of the tube, so as to form a liquid contact for the lower end of a movable wire, suspended so as to be capable of rotating at its lower extremity about the axis of the tube. On the passage of an electric current through the wire, a continuous rotary motion was produced in it, the direction of which depends both on the direction of the current, and on the polarity of the end of the magnet around which the rotation occurs.

The great value of the electric motor to the world is too evident to need any proof. The number of purposes for which electric motors are now employed is so great that the actual number of motors in daily use is almost incredible, and every year sees this number rapidly increasing.

The above are the more important machines or devices

that have been directly derived from Faraday's great investigation as to the production of electricity from magnetism. Let us now inquire briefly as to what useful processes or industries have been rendered possible by the existence of these machines.

Apparently one of the most marked requirements of our twentieth-century civilization is that man shall be readily able to extend the day far into the night. He can no longer go to sleep when the sun sets, and keep abreast with his competitors. Of all artificial illuminants yet employed, the arc and the incandescent electric lights are unquestionably the best, whether from a sanitary, æsthetic, or truest economical standpoint. Now, while it is a well-known matter of record that both arc and incandescent lights were invented long before Faraday's time, yet it was not until a source of electricity was invented, superior both in economy and convenience to the voltaic battery, that either of these lights became commercial possibilities. Such an electric source was given to the world by Faraday through his invention of the dynamo-electric machine, and it was not until this machine was sufficiently developed and improved that commercial electric lighting became possible. The energy of burning coal, through the steam-engine, working the dynamo, is far cheaper and more efficient for producing electricity than the consumption of metals through the voltaic pile.

It is characteristic of the modesty of Faraday that when, in after-life, he heard inventors speaking of their electric lights, he refrained from claiming the electric light as his own, although, without the machine he taught the world how to construct, commercial lighting would have been an impossibility.

The marvellous activity in the electric arts and sciences, which followed as a natural result of Faraday giving to the world in the dynamo-electric machine a cheap electric source, naturally leads to the inquiry as to whether at a somewhat later day a yet greater revolution may not follow the production of a still cheaper electric source. In point of fact such a discovery is by no means an impossibility. When a dynamo-electric machine is caused to produce an electric current by the intervention of a steam-engine, the transformation of energy which takes place from the energy of the coal to electric energy is an extremely wasteful one. Could some practical method be discovered by means of which the burning of coal liberates electric energy, instead of heat energy, an electric source would be discovered that would far exceed in economy the best dynamo in existence. With such a discovery what the results would be no one can say; this much is certain, that it would, among other things, relegate the steam-engine to the scrap-heap, and solve the problem of aerial navigation.

What is justly regarded as one of the greatest achievements of modern times is the electrical transmission of power over comparatively great distances. At some cheap source of energy, say, at a water-fall, a water-wheel is employed to drive a dynamo or generator, thus converting mechanical energy into electrical energy. This electricity is passed over a conducting line to a distant station, where it is either directly utilized for the purpose of lighting, heating, chemical decomposition, etc., or indirectly utilized for the purpose of obtaining mechanical power for driving machinery, by passing it through an electric motor. The electric transmission of power has been successfully made in California over a distance of some 220 miles, at a pressure on transmission lines of 50,000 volts.

The high pressures required for the economical use of transmission lines necessitates the employment of transformers at each end of the line; namely, step-up transformers at the transmitting end, to raise the voltage delivered by the generators, and step-down transformers, at the receiving end, to lower it for use in the various translating devices. These transformers are employed in connection with alternating-current dynamos. Faraday not only gave to the world the first electric generator, but also the first transformer, and one of the first electric motors, and without these gifts the electric transmission of power over long distances, which has

justly been regarded as one of the most marvellous achievements of our age, would have been an impossibility.

In high-tension circuits over which such pressures as 50,000 volts is transmitted, no little difficulty is experienced from leakage and consequent loss of energy. This leakage occurs both between the line conductors and at the insulators placed on the pole lines forming the line circuit. The insulators are made either of glass or porcelain, and are of a peculiar form known as triple petticoat pattern. The loss on such lines, due to leakage between wires, is greater than that which takes place at the pole insulators, and is diminished by keeping the circuit wires as far apart as possible.

In the early history of the art, electric transmission of power was effected by means of direct-current generators and motors, — generators and motors through which the current always passed in the same direction. Such generators and motors, however, possessed inconveniences that prevented extensive commercial transmission of power, since, as we have seen, high pressure was necessary for efficiency in such transmission, and the collecting-brushes and commutators employed in all direct-current generators and motors to carry the current from the machine or to the motor, were a constant source of trouble and danger.

When the alternating-current motor first came into

general use, it was employed, in connection with the alternating-current generator, in electric transmission systems; but such motors also possess the inconvenience of not readily starting from a state of rest, with their full turning power, or torque, and of therefore being unsuitable where the motor requires to be frequently stopped or started. Had these difficulties remained unsolved, long-distance electric transmission of power, so successful in operation to-day, and which bids fair to be still more successful in the near future, would have been impossible. Fortunately, these difficulties were overcome by the genius of Nikola Tesla, in the invention of the multiphase alternating-current motor, or the induction motor, as it is now generally called. Although Baily, Deprez, and Ferraris had accomplished much before Tesla's time, yet it was practically to the investigations and discoveries made by Tesla, between 1887 and 1891, that the induction motor of to-day is due.

Another requirement of our twentieth-century civilization is rapid transit, either urban or inter-urban, and this is afforded by various systems of electric street railways or electric traction generally, including electric locomotives and electric automobiles. The wonderful growth in this direction which has been witnessed in the last few decades would have been impossible without the electric generator and motor.

both gifts of Faraday to the world. Their application in this direction must, therefore, go to swell the debt our civilization owes to the labors of this great investigator.

In the system of electric street-car propulsion very generally employed to-day, a single trolley wheel is employed for taking the driving current from an overhead conductor, suspended above the street. The trolley wheel is supported by a trolley pole, and is maintained in good electric contact with the trolley wire, or overhead conductor. By this means the current passes from the wire down the conductor connected with the trolley pole, thence through the motors placed below the body of the car, and from them, through the track or ground-return, back to the power station. A small portion of the current is employed for lighting the electric lamps in the car. In some systems an underground trolley is employed.

An important device, called the series-parallel controller, is employed in all systems of electric street-car propulsion. It consists of means by which the starting and stopping of the car, and changes, both in its speed and direction, are placed under the control of the motorman. A separate controller is placed on both platforms of the car. The series-parallel controller consists essentially of a switch by means of which the several motors, that are employed in all street cars, can

be variously connected with each other, or with different electric resistances, or can be successively cut out or introduced into the circuit, so that the speed of the car can be regulated at will, as the handle of the controller is moved by the motorman to the various notches on the top of the controller box. As generally arranged, the speed increases from the first notch or starting position to the last notch, movements in the opposite direction changing connections in the opposite order of succession, and, therefore, slowing the car. There is, however, no definite speed corresponding to each notch, for this will vary with the load on each car, and with the gradient upon which it may be running.

But there is another valuable gift received by the world as a result of this great discovery of Faraday; namely, that most marvellous instrument of modern times, the speaking telephone. This instrument was invented in 1861, by Philip Ries, and subsequently independently reinvented in 1876, by Elisha Gray and Alexander Graham Bell.

As is well known, it is electric currents and not sound-waves that are transmitted over a telephone circuit. The magneto-electric telephone in its simplest form consists of a pair of instruments called respectively the transmitter and the receiver. We talk into the transmitter and listen at the receiver. Both transmitter and receiver consist of a permanent magnet of

hardened steel around one end of which is placed a coil of insulated wire. In front of this coil a diaphragm, or thin plate, of soft iron, is so supported as to be capable of freely vibrating towards and from the magnet pole.

The operation of the transmitting instrument is readily understood in the light of Faraday's discovery. It is simply a dynamo-electric machine driven by the voice of the speaker. As the sound-waves from the speaker's voice strike against the diaphragm, which has become magnetic from its nearness to the magnet pole, electric currents are generated in the coil of wire surrounding such pole, since the to-and-fro motions cause the lines of electro-magnetic force to pass through the wire on the moving coil. The operation of the receiving instrument is also readily understood. It acts as an electric motor driven by the to-and-fro currents generated by the transmitter. As these currents are transmitted over the wire, they pass through the coil of wire on the receiving instrument, and reproduce therein the exact movements of the transmitting diaphragm, since, as they strengthen or weaken the magnetism of the pole, they cause similar motions in the diaphragm placed before it. Consequently, one listening at the receiving diaphragm will hear all that is uttered into the transmitting diaphragm. It was thus, by the combination of the dynamo and motor, both of

which were given by Faraday to the world, that we have received this priceless instrument, which has been so potent in its effects on the civilization of the Twentieth century.

The electric telegraph had its beginnings long before Faraday's time. As early as 1847, Watson had erected a line some two miles in length, extending over the housetops in London, and operated it by means of discharges from an ordinary frictional electric machine. In 1774, Lesage had erected in Geneva an electric telegraph consisting of a number of metallic wires, one for each letter of the alphabet. These wires were carefully insulated from each other. When a message was to be sent over this early telegraphic line an electric discharge was passed through the particular wire representing the letter of the alphabet to be sent; this discharge, reaching the other end, caused a pithball to be repelled and thus laboriously, letter by letter, the message was transmitted. How ludicrously cumbersome was such an instrument when contrasted with the Morse electro-magnetic telegraph of to-day, which requires but a single wire; or with the harmonic telegraph of Gray, which permits the simultaneous transmission of eight or more separate messages over a single wire; or with the wonderful quadruplex telegraphic system of Edison which permits the simultaneous transmission of four separate and distinct messages over a

single wire, two in one direction, and two in the opposite direction at the same time; or with the still more wonderful multiplex telegraph of Delaney, which is able to simultaneously transmit as many as seventy-two separate messages over a single wire, thirty-six in one direction and thirty-six in the opposite direction. These achievements have been possible only through the researches and discoveries of Oersted, Faraday, and hosts of other eminent workers; for, it was the electro-magnet, rendered possible by Oersted, together with the magnificent discoveries of Faraday, and others since his time, that these marvellous advances in electro-telegraphic transmission of intelligence have become possibilities.

Before completing this brief sketch of some of the effects that Faraday's work has had on the practical arts and sciences, let us briefly examine the generating plants that are either in operation or construction at Niagara Falls.

Some idea of the size of the Niagara Falls generating plant on the American side may be gained from the fact that there have already been installed eleven of the separate 5,000 horse-power generators. The remaining capacity of the tunnel will permit of the installation of 50,000 additional horse-power, or 105,000 horse-power in all.

On the Canadian side of the Falls another great plant is about to be erected with an ultimate capacity

of several hundred thousand horse-power. Here, however, the size of the generating unit will be double that on the American side, or 10,000 horse-power. These generators will be wound to produce an electric pressure of 12,000 volts, raised by means of step-up transformers to 22,000, 40,000, and 60,000 volts, according to the distance of transmission. Each of the revolving parts of these machines will weigh 141,000 pounds. To what gigantic proportions has the little infant dynamo of Faraday grown in this short time since its birth!

The low rates at which electric power can be sold in the immediate neighborhood of the Niagara generating plant have naturally resulted in an enormous growth of the electro-chemical industries, for these industries could never otherwise develop into extended commercial applications. Of the total output of, say, 55,000 horse-power at the Niagara Falls generating plant, no less than 23,200 horse-power is used in various electrolytic and electro-thermal processes in the immediate neighborhood. Some of the more important consumers of the electric power, named in the order of consumption, are for the manufacture of the following products: calcium carbide, aluminium, caustic soda and bleaching salt, carborundum, and graphite.

Calcium carbide, employed in the production of acetylene gas, either for the purposes of artificial illumination, or for the manufacture of ethyl alcohol, is pro-

duced by subjecting a mixture of carbon and lime to the prolonged action of heat in an electric furnace.

Aluminium, the now well-known valuable metal, present in clay, bauxite, and a variety of other mineral substances, is electrolytically deposited from a bath of alumina obtained by dissolving bauxite either in potassium fluoride or in cryolite. Aluminium is now coming into extended use in the construction of long-distance electric power transmission lines.

Caustic soda and bleaching salt are produced by the electrolytic decomposition of brine (chloride of sodium). The chlorine liberated at the anode is employed in the manufacture of bleaching-salt, and the sodium is liberated at a mercury cathode, with which it at once enters into combination as an alloy. On throwing this alloy into water the sodium is liberated as caustic soda.

Carborundum, a silicide of carbon, is a valuable substance produced by the action of the heat of an electric furnace on an intimate mixture of carbon and sand. It has an extensive use as an abrasive for grinding and polishing.

Artificial graphite is another product produced by the long-continued action of the heat of the electric furnace on carbon under certain conditions.

According to reports from the United States Geological Survey, the graphite works at Niagara Falls produced in 1901, 2,500,000 lbs. of artificial graphite,

valued at $119,000. This was an increase from 860,270 lbs., valued at $69,860 for 1900, and from 162,382 lbs., valued at $10,140, in 1897, the first year of its commercial production. In 1901, more than half of the output was in the form of graphitized electrodes employed in the production of caustic soda and bleaching salt, and in other electrolytic processes.

The Niagara Falls power transmission system stands to-day as a magnificent testimonial to the genius of Faraday, and as a living monument of the varied and valuable gifts his researches have bestowed upon mankind. For here we have not only the dynamo, motors, and transformers that he gave freely to the world, not only the alternating-current transformer, and the system of transmission of power, but we even find that the principal consumers of the enormous electric power produced are employing it in carrying on some of the many processes in electro-chemistry, a science that he had done so much to advance.

Among some of the surprises electro-chemistry may have in store for the world in the comparatively near future, may be a nearer approach to a mastery of the laws which govern the combination of elementary substances when under the influence of plant-life. If these laws ever become so well known that man is able to form in his laboratory the various food products that are now formed naturally in plant organisms, such a revolution

would be wrought that the work of the agriculturist would be largely transferred to the electro-chemist. Some little has already been done in the direct formation of some vegetable substances, such as camphor, the peculiar flavoring substance present in the vanilla bean, and in many other substances. Should such discoveries ever reach to the direct formation of some food staple, the wide-reaching importance and significance of the discovery would be almost beyond comprehension.

But, while the direct electro-synthetic formation of food products is yet to be accomplished on a practical scale, the problem appears to be nearing actual solution in an indirect manner. It has been known since the time of Cavendish, in 1785, that small quantities of nitric acid could be formed directly from the nitrogen and oxygen of the atmosphere by the passage of electric sparks; but heretofore, the quantity so found has been too small to be of any commercial value. Quite recently, however, one of the electro-chemical companies at Niagara Falls has succeeded in commercially solving the important problem of the fixation of the nitrogen of the atmosphere; it being claimed that the cost of thus producing one ton of commercial nitric acid, of a market value of over eighty dollars, does not greatly exceed twenty dollars. Since sodium nitrate can readily be produced by the process, and its value as a fertilizer of wheat-fields is too well known to need comment,

there would thus, to a limited extent, be indirectly solved the electro-chemical production of food staples.

Faraday's high rank as an investigator in the domain of natural science was fully recognized by the learned societies of his time, by admission into their fellowships. As early as 1824, he was honored by the Royal Society of London by election as one of its Fellows, and in 1825 he had become a member of the Royal Institution. It is recorded of the great philosopher that the membership in the Royal Institution was the only one which he personally sought; all others came unsought, but they came so rapidly from all portions of the globe that in 1844 he was a member of no less than seventy of the leading learned societies of the world. Ries, the German electrician, so well known in connection with his invention of the speaking telephone, addressed Faraday as "Professor Michael Faraday, Member of all the Academies." Besides his membership in the learned societies, Faraday received numerous degrees from the colleges and universities of his time. Among some of these are the following: The University of Prague, the degree of Ph.D.; Oxford, the degree of D.C.L.; and Cambridge, the degree of LL.D. He also received numerous medals of honor, and was offered the Presidency of the Royal Society, which, however, he declined, as he did also a knighthood proffered by the government of England.

Faraday died on the 25th of August, 1867, after a long, well-spent, useful life.

We have thus briefly traced some of the more important discoveries of Michael Faraday. Many have necessarily been passed by, but what we have given are more than sufficient to stamp him as a great philosopher and investigator. Speaking of Faraday in this connection, Professor Tyndall says: "Take him for all in all, I think it will be conceded that Michael Faraday is the greatest experimental philosopher the world has ever seen; and I will add the opinion that the progress of future research will tend not to diminish or decrease, but to enhance and glorify, the labors of this mighty investigator."

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RUDOLF VIRCHOW.

1821–1902.

MEDICINE AND SURGERY.

RUDOLF VIRCHOW.

MEDICINE AND SURGERY.

By FRANK P. FOSTER, M.D.

STAGNATION was the state of medicine when the Nineteenth Century opened. It was only three years before that Jenner had announced and demonstrated the protective efficacy of vaccination against small-pox. His teaching, in spite of the vehement cavillings of the "antis" of his day, gained credence readily, and vaccination speedily became recognized and was constantly resorted to, but hardly any attempt at perfecting the practice was made until after more than fifty years had elapsed. His discovery — or, rather, his proof of the truth of a rustic tradition — fell like a pebble into the doldrums; the ripple soon subsided, and nobody was encouraged to start another. At the present time such an announcement would be promptly followed by investigations leading up to such doctrines as that of the attenuation of viruses and that of antitoxines. But

the times were not ripe for anything of that sort; medicine reposed on tradition, or at best gave itself only to such plausibilities in the way of innovation as were cleverly advocated. Physicians strove not to advance the healing art; as individuals, they were content to rely on their manners, their tact, and their assumption of wisdom. In short, the body medical was in a state of suspended animation, possessed of a mere vegetative existence.

The Humoral pathology, or that doctrine of the nature of disease which ascribed all ailments to excess, deficiency, or ill "concoction" of some one of the four humors (yellow and black bile, blood, and phlegm), had not yet lost its hold on men's convictions, or at least not further than to make them look upon exposure to cold and errors of diet as amply explanatory of all diseases not plainly infectious. The medical writers who were most revered were those who busied themselves with nosology; that is to say, the naming and classifying of diseases. Wonderful were the onomatological feats performed by some of these men, and most diverse and grotesque were the data on which they founded their classifications. To label a disease was high art; to cure it was something that Providence might or might not allow. In the treatment of "sthenic" acute diseases (meaning those accompanied by excitement and high fever), blood-letting, mercury

given to the point of salivation, antimony, and opium, together with starvation (all included under the euphemism of "lowering measures"), were the means universally resorted to and reputed "sheet anchors." Some advance had been made from the times when disease had been looked upon as an entity to be exorcised, but it was still so far regarded as a material thing that it was to be starved out.

But the century was not out of its second decade when signs of an awakening from this lethargy began to show themselves. The first steps, naturally, were along preparatory lines, and for those we are largely indebted to the physicists, the chemists, and the botanists. Gross anatomy became better known, owing for the most part to more enlightened legislation on the subject of the dissection of the human body; minute anatomy (histology) sprang into existence as the result of improvements of the compound microscope. Physiology took on something of the experimental; and medication was rendered far less gross and repulsive by the isolation of the active principles of medicinal plants. But it was long after all this that the telling strides were taken. Up to within the memory of many men who are now living, "peritonitis" tortured its victims to death, said "peritonitis" being often interpreted as a manifestation of rheumatism, for example, and no well-directed interposition

was attempted against it, whereas we now know perfectly well that the vast majority of cases of peritonitis are due to local septic poisoning and for the most part quite readily remediable by the removal (with a minimum of danger) of the organ from which such poisoning arises — almost always the vermiform appendix. "Appendicitis," of which we hear so much nowadays, is no new disease; it is simply the "peritonitis" that killed so many people in former times. But while no well-informed person would now maintain that this disease was a new one, there are many, and those, too, among the best instructed, who find it difficult to avoid the conclusion that, if not new, it must at least be of far more frequent occurrence than formerly. It must be borne in mind, however, that in the great majority of instances in past years it ended spontaneously in recovery and was forgotten.

Two features of the progress in medicine in the Nineteenth Century, negative as they may seem to have been, were undoubtedly potent in the promotion of advance. They were the recognition of the fact that many dangerous diseases are self-limited, and the experiment of the so-called "expectant treatment." The result of the first of them was to teach men to desist from futile attempts to *cure* the self-limited diseases, in the sense of cutting them short in their course, and the "expectant treatment" followed as a natural conse-

quence. It was a method of managing disease rather than attempting to cure it. There was no interference save o promote the patient's comfort, to nourish him as thoroughly as might be without unduly taxing his powers, and to meet complications as they arose. It was stooping to conquer, perhaps, but it was a policy that conduced greatly to the well-being of the sick, improved their chances of recovery, and enabled physicians to study disease more accurately by reason of its course not being rendered irregular by meddlesome medication. It has never been dropped, and it never will be, save as such directly curative agents as the antitoxines are made available.

In the early part of the century, except for gross anatomy and operative surgery, medicine was taught almost wholly, so far as the schools were concerned, by means of didactic lectures. The "drawing" capacity of a professor was proportionate rather to his rhetorical powers and to the persuasiveness with which he inculcated the views peculiar to himself than to the amount of real information that he conveyed to the students. Although the apprentice system — for that was what the practice of students' attaching themselves to individual practitioners, whom they called their preceptors, virtually amounted to — in many instances made up more or less completely for the lack of systematic clinical teaching, yet in the great majority of cases it

amounted to little more than the preceptor's allowing the student the use of his library and occasionally examining into the latter's diligence and intelligence, in return for which he, the preceptor, required an annual fee and exacted from the student such minor services as his proficiency enabled him to render. It is true the students "walked" the hospitals, drinking in some great man's utterances, but they did it in droves, not a moiety of them being able to get a good look at a patient, unless it was such a passing glance as might tell them that the patient was jaundiced. By clinical teaching we understand teaching, not in glittering generalities, but in the concrete, either at the bedside, as the word *clinical* originally implied, or at least with the patient actually present to illustrate in his person the professor's descriptions and the success or failure of the treatment employed. The clinic is now firmly established, and has been for years, but it was long before this grand result was attained.

Experimental methods of study gradually came into vogue, particularly in the domain of physiology. In this sphere Dr. William Beaumont, of the United States Army, was a pioneer. His historic experiments on Alexis St. Martin, a soldier who had been wounded in the stomach and recovered with a permanent opening into that organ, will ever rank among the most important of the early experimental studies of digestion. It

was not long before Claude Bernard extended similar inquiries to the other functions of the body, notably those of the nervous system; and since his time there has been a long array of brilliant investigators of physiology and of other branches of science tributary to medicine. Experiments on living animals were almost the only means of carrying on these researches. In the early days the animals employed were doubtless put to a great deal of pain — perhaps in many instances to unnecessary suffering — and an altogether laudable feeling of humanity has led good people to band themselves together for the purpose of putting a stop to vivisection, or at least of greatly restricting the practice and of freeing it from all avoidable infliction of pain. These praiseworthy efforts have in some instances been carried so far, unfortunately, as to seriously hamper scientific investigation — investigation which has for its object the alleviation of human suffering and the saving of human life. We may earnestly deprecate and strive to prevent wanton reiteration of painful experiments for purposes of demonstrating anew that which is unquestioned, and we may resort to all possible means to render necessary experiments free from actual pain (from the anguish of trepidation we can seldom relieve the poor animals), but let us not block the wheels of scientific progress.

At the dawn of the Nineteenth Century, to examine

a sick person's pulse, to inspect his tongue, to observe his breathing, to interrogate his skin by our sense of touch, and to try to make his statements and those of his friends fit in with some tenable theory of the nature of his ailment, were about all we could do. Possibly it was because he realized to an uncommon degree the tremendous impediment of this narrow limitation that Samuel Hahnemann, the founder of Homœopathy, cut the Gordian knot in sheer rebelliousness, and proclaimed, as he virtually did, that a diagnosis was not necessary to the successful treatment of disease, but that one only needed to know empirically how to subdue symptoms, meaning mainly, if not solely, what we term "subjective" symptoms — those of which the patient complains, as opposed to those that we ourselves discover. But the physical examination of the sick, before extremely meagre in its sphere and restricted in its possibilities, was destined to expand before many years into the minute and positive physical diagnosis of the present day.

In the year 1816 a French physician, Réné Théophile Hyacinthe Laennec, achieved undying fame by publishing to the world an account of his labors in the application of mediate auscultation and of percussion to the diagnosis of the diseases of the chest. It is true that no less a personage than the "Father of Medicine," Hippocrates, is reputed to have practised succussion as

a means of diagnosis; that is, the shaking of a patient, as one would shake a cask, to ascertain by the occurrence or non-occurrence of a splashing sound if the person's pleural cavity was distended partly with water and partly with air. It is probable that Hippocrates and many others after him carried the physical examination of the chest still further, for it is difficult to imagine, for example, that so simple a device as that of thumping a partition to make out the situation of a joist by the sound evoked should not early have been applied to the human chest. But, be this as it may, to Laennec belongs the great credit of having laid a substantial foundation for the physical diagnosis of the present time, and, more than for laying a foundation, for constructing a fairly complete edifice. He who should now undertake to practise general medicine without having first made himself proficient in the detection and interpretation of the sounds elicited by auscultation and percussion in diseases of the heart and lungs would foredoom himself to failure.

It was not until many years later, early in the second half of the century, that the clinical thermometer came into general use, but it soon showed most strikingly the superiority of the "instrument of precision" to the unaided senses of man. Who would think now of trying to estimate the height of a fever by laying his hand on the patient's skin, or who, even among the laity, would

be satisfied with such a procedure? "Doubtless," said the present writer in a former publication ("New York Medical Journal," Dec. 29, 1900), "the use of the thermometer has occasionally given rise to needless alarm, but almost invariably it may be interpreted with great certainty. Often it dispels unnecessary anxiety as in a twinkling by its negative indication, and surely it is to be credited with being distinctly diagnostic in those diseases of which it has itself established the 'curve.'" By the thermometric "curve" of a disease is understood the general visual impression made by the graphic chart of a temperature record — the course of a zigzag line connecting the points indicated by the various individual observations.

Numerous other instruments of precision are now in constant use, among the most wonderful of which perhaps is the ophthalmoscope, whereby we are enabled to subject the retina and the intervening media of the eye to minute visual examination. There is not an organ of the body that is not now interrogated daily in the way of physical diagnosis, and we even examine separately the secretion of each of the two kidneys. In addition, there are multitudinous specific signs of which we were not long ago in complete ignorance. To cite only one of these, there is Widal's agglutination test, by which the bacteriologist can usually make a diagnosis of typhoid fever far in advance of the time

at which it could otherwise be distinguished. The use of the Röntgen rays in diagnosis was one of the crowning achievements of the century, and now we seem about to enter upon a course of their successful employment in the treatment of disease — even some forms of cancer — as well as in its detection.

Beyond the vermin that infest the skin and the hair, tapeworm, and a few other intestinal worms, little if anything was known of morbific parasites before the Nineteenth Century; but the labors of Van Beneden, Küchenmeister, Cobbold, Manson, Laveran, and others have now established the causal relationship between great numbers of animal parasites — gross and microscopic — and certain definite morbid states. This has led to a great increase in our knowledge of the connection between the parasites of the lower animals and grave disease in human beings, and on this knowledge rest many of the precautions that we are now able to take against the spread of such disease. From the consideration of animal parasites as the direct causes of disease, we naturally come to the contemplation of the subject of insects as the carriers of disease. The later years of the century have witnessed the demonstration of the fly's agency in the transmission of malignant pustule and typhoid fever, and that of certain mosquitoes in the conveyance of yellow fever and malarial disease. We now know that bad air (the original

meaning of the word *malaria*) has nothing to do with fever and ague, and that swamps are not unwholesome if they are free from infected mosquitoes. The mosquito does not originate the malarial infection; it simply serves as the temporary host of the micro-organism (*Plasmodium malariæ*) which is the cause of the disease, having obtained its transient "guest" from some human being. Consequently, marshy districts that are full of mosquitoes are not malarious unless the mosquitoes are of the kinds capable of lodging the plasmodium, and unless there is or has recently been present in the neighborhood some person affected with malarial disease. Moreover, the most virulently malarious region is a safe place of residence for human beings, provided they protect themselves absolutely against the bite of the mosquito. This has been strikingly demonstrated in the case of the Roman Campagna.

From the disease-producing animal parasites we come now to those that are believed to be of vegetable nature. Under the general name of *bacteria*, there are multitudes of micro-organisms having pathogenic powers, each giving rise to some definite specific disease, and certain associations of different bacteria causing particular morbid conditions. Generations ago physicians had a glimmering of what we now term the germ theory of disease, as was shown by their use of such expressions as *materies morbi* and morbid poisons.

Even the definite relationship of special microscopic organisms to individual diseases was foreshadowed by Salisbury nearly fifty years ago. But it was not until years after those conceptions, and in no wise descended from or led up to by them, that an intelligible and satisfactory germ theory of disease was formulated.

It is to Pasteur, the immortal chemist, that we owe this theory, as well as that of the attenuation of viruses — both of more than theoretical import, since they have given us aseptic surgery, the power of frequently preventing hydrophobia, the antitoxine treatment of diphtheria, and the ability to stay the hand of Death in the form of many a stalking pestilence. Every infectious disease is now held to be due to its own particular micro-organism, and many diseases that were not until recently thought to be infectious are now classed as such because they have been proved to be caused by living germs. Conspicuous among these diseases is pulmonary consumption. In the case of almost every one of these diseases we have discovered the specific germ and are able to demonstrate its presence, either by its microscopical appearance, by its behavior on contact with certain stains, or by the forms that cultures of it assume. The micro-organism of small-pox and that of cancer (the existence of which is assumed) have not yet been isolated. Some of these germs, like that of tetanus (lockjaw), gain entrance to the system

only through a wound; others, like those of typhoid fever and cholera, are swallowed; others, like that of pneumonia, are inhaled; still others, like that of tuberculous disease, are either swallowed or inhaled. Some are believed to be transmissible to the unborn child; and a few are ordinarily harmless parasites, becoming pathogenic only when they accidentally gain access to other parts of the system than those which constitute their natural habitat.

These microscopic organisms do not by their mere presence set up disease, unless indeed they are in such overwhelming numbers as to block the capillary blood vessels mechanically. Some of them are carried broadcast in the blood current, while others remain at the point of entrance; in either case they elaborate certain products, termed toxines, which act, either locally or through the circulation, to cause the disease. These toxines eventually kill the micro-organisms that produced them, quite as an animal may be smothered in its own exhalations; or at least they would do so if the "host" survived long enough for the completion of the process. Meantime, they have either killed the "host" or been defeated by certain very interesting natural processes. But before either of these occurrences has had time to take place, fortunately, in the great majority of instances, save those of exposure to the most deadly of infections, the vital power of the

invaded individual has coped successfully with the invaders at the very point of attack — has repulsed the attacking party without appreciable impairment of its own force — and no illness results. For example, practically all of us inhale the germ of consumption repeatedly, but most of us suffer no harm from it simply because the fluids which bathe the surface on which the germ effects a lodgment are endowed with properties which either kill the germ or rob it of its power for harm; but these properties suffice only when the general health is unimpaired.

In case the attack is not successfully repelled at the outset, what happens? There begins a struggle between the invaders and what may be called the reserves of the organism, consisting of the white blood corpuscles, which undergo a great augmentation in number. These corpuscles are endowed with the faculty of amœboid movement; that is to say, they may shoot out projections from their substance, and even convert themselves for the time being into traps, seizing upon the pathogenic bacteria, incarcerating them within their own mass, and carrying them away to be thrust out of the system by organs whose function it is to eliminate extraneous matter. These corpuscles are, indeed, said figuratively to *eat* the malign micro-organisms, whence they have been termed phagocytes (from φαγεῖν, to eat, and κύτος, a cell); also because they carry away

refuse and noxious material, they have been called "the scavengers of the system." By means of their amœboid movement they are enabled to worm themselves through inconceivably minute apertures in the blood vessels, and attack and devour peccant matter wherever it may have effected a lodgment. These white corpuscles are also known as leucocytes, and their increase in number when they are called upon to resist bacterial invasion is spoken of as hyperleucocytosis. The discovery of their protective function is to be credited to Metchnikoff, a Russian physician now teaching in Paris. When they migrate from the blood vessels in great numbers they finally, after having fulfilled their office as phagocytes, degenerate into the corpuscular elements of pus, which is the creamy liquid contained in an abscess. Their migratory power was discovered by Cohnheim.

But as a general thing the phagocytes do not succeed in making away with all the pathogenic germs, or even with enough of them to prevent the illness which they tend to produce. The further combat is between the poisonous products, termed toxines, engendered by the bacteria and certain antidotal substances, called antitoxines, newly created in the watery portion of the blood by some wonderful provision of Nature that is not yet well understood. Each infective disease has its special toxine, and for the destruction of each the blood pre-

pares its particular antitoxine; possibly, however, some of the antitoxines may be efficacious against more than one kind of toxine, for there are physicians who are convinced that vaccination is a temporary preventive of whooping-cough. But the elaboration of an antitoxine takes time, and the result in any given case, whether in recovery or in death, seems to be settled by the ability or inability of the vital powers of the individual to hold out until they are relieved by the evolution of the necessary amount of antitoxine.

In the long run, provided the sick person survives, more antitoxine is generated than is required to save life. The excess remains in the system for a greater or lesser length of time, and this fact explains the individual's subsequent immunity to the disease from which he has recovered; any fresh invading force of the microbes of that disease finds that defensive preparations have been made in advance. In the case of some diseases this acquired immunity is usually lifelong, as in that of small-pox; in others, of which influenza is a notable example, it is as a rule very transitory; and there are all gradations between the two. It is thought that this acquired immunity to some diseases may be transmitted to the offspring, for it is quite certain that there are many people who are from birth insusceptible to scarlet fever, no matter what may be the extent of their exposure to that disease.

The recognition of Nature's elaboration of protective antitoxines has led to their artificial cultivation in the lower animals, and, thus produced, they have been used with brilliant results in the prevention and cure of at least one formidable disease, diphtheria. The immense reduction of the mortality from this disease that has followed the introduction of the treatment with the artificial antitoxine we owe to Behring, of Germany and Roux, of France. Omitting unnecessary details, we may describe the process of obtaining diphtheria antitoxine as follows: A certain amount of diphtheritic poison (of the bacteriological sort, prepared by cultivating the diphtheria microbe) is injected into the circulation of a horse — sufficient to make the horse sick, but not enough to endanger his life. The horse's system straightway begins to elaborate the protective antitoxine, and there results from this one injection a sufficient amount of it to save the horse, although far too little to make the serum of his blood potent enough for medicinal use. Hence, after the lapse of a suitable interval, he is again injected with diphtheritic poison, and for the second time his blood begins to generate the antitoxine. And the process is repeated again and again, the virulence of the poison being increased each time, until the horse's blood is fairly reeking with antitoxine. Then blood is drawn freely from the horse, and it is allowed to separate into clot and serum, the

latter alone being the part destined for use. This serum is tested on a small animal that has been inoculated with a deadly dose of the diphtheritic poison; if it saves the little creature from death, it is assumed to be potent enough for use on human beings, and, handled with all possible precautions against putrefaction or any contamination with pathogenic bacteria, it is furnished to physicians, its degree of potency being designated in "units."

If in this brief article, which does not purport to be more than a sketch of the tremendous strides made by medicine in the Nineteenth Century, so much space has been given to the germ theory of disease, it is because the demonstration of the truth of that theory has been absolute, and has constituted the very marrow of almost all the medical progress of the century that has been the outcome of continuous thought and study as opposed to chance discovery.

Such results as the germ theory has now led to in the treatment of diphtheria it had already accomplished in the field of surgery as a consequence of that strict asepticism which, originating with Joseph Lister (now Lord Lister), and rapidly carried by him to a condition verging on technical completeness, was soon taken up by surgeons all over the world and brought wellnigh to perfection, so that the mortality of wounds of all sorts has been tremendously reduced, and many surgi-

cal operations are now practised frequently — indeed, whenever the occasion for them arises — that before the days of Listerism would have been looked upon as almost tantamount to the patient's death-warrant. More particularly is this the case as to operations which involve opening into the abdomen, the chest, or the cranium. So little risk now attaches to such operations, properly performed, that the opening of the abdominal cavity for the mere purpose of ascertaining the condition of its contents — "exploratory laparotomy," as it is called — is a matter of constant occurrence. Curiously enough, in some way not yet satisfactorily explained, that procedure in itself, without anything further being done, has in many instances resulted in decided amelioration of a morbid condition, if not in its cure. A striking example of this is seen in the benefit that often results in cases of one form of "consumption of the bowels," namely, tuberculous disease of the membrane that lines the abdominal wall and invests the abdominal organs. This is not the only operation that does good mysteriously; that of cutting out a bit of the iris in a form of deep-seated eye disease, glaucoma, that tends toward complete blindness, is hardly more explicable; neither is an incision of the capsule of the kidney for certain forms of Bright's disease, each of which stays the progress of the trouble in a goodly proportion of instances.

Another of the great divisions of the healing art, that of midwifery, has been enhanced quite as much as general surgery by the employment of Listerism. The process of childbirth, although a perfectly natural one, almost necessarily carries with it a certain amount of laceration, and, through the wound surfaces thus produced, absorption of poisonous material was formerly so frequent that puerperal fever figured prominently in mortality reports. It was Oliver Wendell Holmes — a graduate in medicine and a professor in the Harvard Medical School, though we are accustomed to think of him only as a delightful writer — who first declared that puerperal fever was the product of infection from without the body, and Semmelweis demonstrated the truth of the proposition. Holmes was a teacher of physiology, and his study of that branch of medical science was in itself enough to convince him of the doctrine which he inculcated.

Listerism must be credited, not only with having added immensely to the safety of the major operations of surgery, but also with having led to great improvement of their technics by reason of the greatly increased frequency with which it has come to be thought justifiable to practise them; what we do again and again we are apt in the end to do well, whereas that which we turn to only in despair and as rarely as possible, we do clumsily and imperfectly. Listerism has

been unjustly alleged by a few to be unworthy of the appreciation in which it is held by the great majority of medical men of all countries; simple cleanliness, it has been urged, is quite as efficient as the full Listerian precautions. This is begging the question, for simple cleanliness, "chemical cleanliness," is all that Listerism purports to accomplish. The use of antiseptics has been decried in the interest of asepticism, as if the whole purpose of antisepticism were not to secure asepsis. Lord Lister is entitled to the full credit of establishing the aseptic surgery of the present day, in spite of the facts that his doctrine followed rather than preceded his early improvements, that aseptic procedures have been brought nearer perfection elsewhere than in his own country, and that the whole system rests on foundations laid by Pasteur.

While it is quite true that to the Listerian theory and practice are almost wholly to be ascribed the favorable results of the major surgery of the present day, we must not forget the immeasurable benefits to the diseased, the injured, and the crippled that have arisen from patient efforts and occasional brilliant intuition that have had no connection with the germ theory of infection. Take the case of a broken leg, for example, an injury that formerly condemned the victim to weeks and weeks of confinement to bed, together with the suffering and danger almost inseparable from the old

methods of the long straight splint and tight bandaging. At the present time he who has met with such a misfortune is commonly able to be about on crutches within a few days, and his broken bone mends while he is cultivating his appetite and indulging in pleasant intercourse with his fellow-men. This great change has been made possible by one device after another, invented by different men. Josiah Crosby introduced the use of sticking-plaster for extension, instead of the chafing bands previously employed; Gurdon Buck substituted elastic extension by means of a weight and pulley for the rude and arbitrary traction in vogue before; James L. Little devised the plaster-of-Paris splint, whereby broken bones were immobilized with hardly appreciable discomfort; and Henry B. Sands established the safety and practicability of applying the plaster-of-Paris splint almost immediately after the reduction ("setting") of the fracture. In the meantime Nathan R. Smith and John T. Hodgen had demonstrated the advantages of suspending a fractured limb from above. All these men were Americans; surely our country has contributed powerfully to the well-being of the subjects of fracture. Other Americans, notably Lewis A. Sayre, have enabled sufferers with joint disease, including the dreaded hip disease, to run about and gain health and strength, instead of languishing in bed Sayre, too, by his suspension treat-

ment and the plaster-of-Paris jacket, set the hunchback on his feet at a stage in his disease in which before he had been forced to prolonged and painful recumbency.

Although men professing special skill in certain operations, and doubtless possessing it, flourished in old times, and left more or less of their impress on the surgery of the present day, for that matter, it was not until the second half of the Nineteenth Century that regional surgery (which is what specialism virtually amounts to) was systematically cultivated. Now there is hardly a portion of the body to which practitioners who make its ailments a specialty do not direct their searching methods of examination or on which they do not practise their ingenious devices in the way of treatment. Specialism has always been decried by a large section of the medical profession. On the other hand, it has been and is still overrated by the laity. The true estimate lies between the two. The specialists have advanced surgery immensely, but, with many honorable exceptions, they have laid too much stress on their several specialties, making too wide a range of ailments fall within them. As for the community at large, their shortcoming lies in the fact that most of them would seek for a specialist in mumps in case that painful but transitory infliction were to come upon them, and in their underrating of the family physician.

To change for a moment to a topic akin to the germ theory of disease, the reader may be reminded that the antitoxine treatment of infectious disease involves in almost every instance the use of some product contained in the serum (that is to say, the watery part of the blood). This leads to the subject of the use of natural and artificial serum in the treatment of disease. To quote again from the article entitled, "The Nineteenth Century in Medicine" ("New York Medical Journal," Dec. 29, 1900): "It has been observed that the normal serum of certain animals that are insusceptible to particular infectious diseases, if injected into the human blood current or even into the subcutaneous tissue, confers more or less of immunity against those diseases. . . . Artificial serum seems to have been first employed by Edmund R. Peaslee as a benign application to the peritonæum in the operation of ovariotomy. His conception of its mode of action is not very clear, but he was a very successful ovariotomist, and we can only conjecture that he builded better than he knew, like many another man. A few years ago much was expected from transfusion of blood, but gradually the conviction has forced itself upon us that it is wellnigh useless, and indeed that, on the whole, it is worse than useless. It has virtually been abandoned. . . . But experiments in transfusion have not been fruitless; they have culminated in

demonstrating the inestimable value of infusions of 'normal,' or 'physiological,' solutions of sodium chloride, and not only of infusions, but also of peritoneal irrigation with such solutions. Many a life has been saved by resorting to this measure, even in apparently desperate cases."

Within about a decade of the close of the century, Robert Koch, whose discoveries and ingenious studies in bacteriology had brought him world-wide renown, announced that he had produced a derivative of the tubercle bacillus, which he termed tuberculin, that he thought might prove curative of tuberculous disease. It was to be injected beneath the skin. If the subject was really tuberculous, he would "react" by manifesting a certain degree of fever, and repeated injections would bring about elimination of the tuberculous deposits and thus effect a cure. The world was carried away with such an announcement coming from such a man, and it was thoroughly believed that at last "the great white plague," consumption, was to be conquered. Tuberculin did, indeed, cure certain minor forms of tuberculous disease, such as the skin affection known as lupus, but it soon became evident that it was almost impotent in the treatment of pulmonary consumption. It has, however, served to enable the veterinarian to make out the existence of tuberculous disease in cattle at an early stage of its course, and it

is probable that by the slaughter of cattle thus found to be tuberculous much infection of human beings has been prevented.

Tuberculin failed of its prime purpose, but it does seem to have marked the initiative of a campaign against consumption which has already proved of incalculable benefit, and bids fair to put that omnipresent disease toward the foot of the list of causes of death. We have made substantial advances in our knowledge of the disease, and we no longer regard it as incurable. We have learned that it is communicable from one person to another, but also that its communication can easily be prevented, so that there is no reason to shrink from association with tuberculous persons. We have learned, too, that consumption in one's progenitors, immediate or remote, hardly makes it even probable that he himself is doomed to suffer with it; the only tuberculous heredity that we now recognize is that of defective ability to withstand the infection, and even this we regard as in most instances readily surmountable. We have learned, furthermore, that pulmonary tuberculous disease is by no means so fatal as it was formerly esteemed, for men whose business it is to make great numbers of post-mortem examinations, such as coroners' physicians and hospital pathologists, assure us that in a very large percentage of cases of death from other causes they find indubitable signs

of past tuberculous disease of the lungs which had ceased its activity — been, in fact, cured, either spontaneously or by medical intervention. Such intervention, it has been abundantly proved, is altogether likely to be successful if it is of the right sort and employed early. There is, to be sure, no cure-all. Powerful as the climatic treatment is, it must be supplemented by measures accurately adapted to the individual case, and failure to comprehend this fact still leads many a phthisical person to his grave. But information is rapidly being diffused, sanatoria for such of the tuberculous as can take advantage of them are multiplying, and those who are shut off from their aid are growing more and more cognizant of how they should live in order to give themselves the best chance of recovery and save their associates from infection. The era of consumption-cures — meaning drugs — is past; but the disease is cured in an ever-increasing proportion of instances, and that, too, by medical though not medicinal measures.

At almost every turn medicine has been powerfully assisted by the sciences which should rather be termed correlative than subsidiary. Notable among them is chemistry. The isolation of the active principles of medicinal plants — such as morphine, quinine, strychnine, and cocaine — has been a remarkable service rendered by chemistry to medicine. How should we

be handicapped if we still had to fight malarial disease with the crude Peruvian bark instead of its chief alkaloid, quinine! And how impracticable if not impossible would it be to render the eye insensitive to pain with any extract of coca leaves, no matter how concentrated — a purpose that we accomplish almost instantly with cocaine! Of minor importance, perhaps, but not to be despised, is the resulting liberation from the old slavery to bulky and nauseous drugs. The isolation of active principles long antedated the synthetical preparations, but the latter came at last — the marvellous array of hypnotics, anodynes, and fever-quellers that are now at our command, largely coal-tar products. But it is not to pure chemistry alone that we are indebted for the elegant dosing of the present day; progressive pharmacy, with its tablets, its coated pills, and its capsules, has put to shame the old-time purveyor of galenicals. Right jauntily do we now take our "soda mint" in case of slight derangement of the stomach, happily oblivious of its vile prototype, the old rhubarb and soda mixture. Even castor oil has been stripped of its repulsiveness by the combinations which the soda water fountain affords.

It was but a step, we can now realize, from the employment of isolated vegetable principles to that of preparations of certain glandular organs of the animal economy, but the doctrine of "internal secretions" had

to intervene, and its evolution took time; not till toward the close of the century did the venerable Brown-Séquard lead up to it. We have not yet come to "eye of newt and toe of frog," but what we have incorporated into modern therapeutics in the way of animal products lends at least some theoretical justification to the ancient use of the dried organs of various animals. It is but a few years since the "ductless glands" — such organs, as, for example, the thyreoid gland (an organ situated in the front of the neck, a small affair in its normal state, but prominent and even pendulous when by its permanent enlargement it comes to constitute a goître) — were looked upon as puzzles, as structures destitute of any known function. Some observers even affirmed that they had no function, though the constancy of goître in cretins ought to have shown the fallacy of this allegation in the case of the thyreoid. We do not now need to be told that the thyreoid gland plays a very important part in the economy, for we know that its surgical removal gives rise to a special disease known as myxœdema, which, in addition to its physical manifestations, is characterized by impairment of the mental powers. Consequently, this ductless gland — a gland, that is to say, which has no obvious canal by which it throws off any product of its activity — must elaborate some material that is necessary to the health of the organism and is imparted to the

blood. That material, whatever it may be, is termed an "internal secretion." Some of the internal secretions have turned out to be of singular value medicinally. It is apparently not the ductless glands alone that furnish internal secretions; the glands that are provided with ducts and yield a definite and observable product secrete also a substance (perhaps more than one) which they give up to the blood.

Prominent among the therapeutic advances of the century is the direct reduction of the high temperature of sunstroke and certain fevers by the use of cold. Although foreshadowed by Currie early in the century by his use of cold affusion in the treatment of scarlet fever, it did not come into general use until the closing decades. It is employed principally in typhoid fever, on the theory that a condition of high fever is in itself a source of danger quite distinct from the other injurious effects of a febrile disease. On the other hand, the employment of high degrees of heat has of late been shown to be a potent agency in the treatment of certain forms of disease, notably in various affections classed as rheumatic. Applications of very hot air, provided it is thoroughly dry, are borne without serious discomfort, and their employment promises to be of greater service in the conditions in which it is resorted to than that of any other agent.

A revelation in the treatment of heart disease has

been effected by the Bad Nauheim system of effervescent baths and resisted exercises. It is not only functional disorders of the heart that are relieved, but grave organic diseases also. Somewhat elaborate explanations of the way in which the treatment proves beneficial have been given, but they are not altogether satisfactory.

Thus far we have dealt chiefly with those developments of medicine that seem to have been the outgrowth of much thought and experiment, but there was one that can hardly be viewed as other than a happy discovery, yet it was one that was fraught with unspeakable mitigation of human suffering, and that wrought a boundless extension of the field of surgery. It was that of anæsthesia. The first to discover an efficient surgical anæsthetic was Crawford W. Long, of Georgia. It has been established that he performed several minor operations with the patient anæsthetized with sulphuric ether, but he did not proclaim his discovery, and so it was reserved for William T. G. Morton, of Boston (then a dentist, but subsequently a physician), to make the first public demonstration of the efficiency of ether as an anæsthetic, which he did in the operating theatre of the Massachusetts General Hospital, in Boston, in the year 1846. The news of Morton's achievement spread broadcast, and it was at once realized that it was destined to revolutionize surgery. It certainly

has done that, and in no less degree than was afterward accomplished by Listerism. Ether did not long remain the only anæsthetic known; Simpson, of Edinburgh, soon discovered that chloroform was possessed of even more decided anæsthetic properties. The inhalation of ether is disagreeable, and it is slow in producing the desired effect, whereas that of chloroform is not unpleasant, and it acts more rapidly. Consequently chloroform soon came to be generally preferred; but abundant experience has finally shown that ether is much the safer agent of the two, and improved methods of administration have almost entirely done away with the objections to its use, so that now it is looked upon as the preferable general anæsthetic. But general anæsthesia — meaning the suspension of sensibility in the whole organism, including unconsciousness — is not always necessary, and sometimes it is undesirable. We have now trustworthy local anæsthetics, the chief of which is cocaine, wherewith we are able to anæsthetize the part to be operated on without rendering the patient unconscious, and the co-operation that a conscious patient may be able to render is sometimes valuable. It was not alone in the direct saving of human suffering that anæsthetics proved a boon to the world; they have made possible an amount of experimental work on animals in the way of vivisection that humane investigators would otherwise have shrunk from, neces-

sary as it has been and still is for the advancement of the healing art.

The operation of ovariotomy, first performed by Ephraim McDowell, of Kentucky, can hardly be classed with the happy accidents; but so little had been said about it or thought concerning it that when the news of it reached Europe "from the wilds of America" the editor of a ponderous English quarterly journal of medicine recorded his incredulity in the words "*Credat Judæus, non ego.*" An ovarian tumor inevitably proves fatal in the long run if it is not removed. In a certain percentage of cases it is malignant and will kill whether it is removed or not, but the general result of ovariotomy has been the saving of thousands of women from untimely death. Bell, of Edinburgh, had imagined the operation and had mentioned it in his lectures, but none the less to McDowell is due the credit of demonstrating its feasibility.

Medicine bore quite its full share in the mitigation of the horrors and hardships of war that marked the Nineteenth Century. Its work was shown in the great reduction of pestilential disease incident to camp life, in prompt aid to the wounded, in the establishment of salubrious field and general hospitals, and in improved methods of transportation of the sick and wounded. Certainly the soldier on the sick list never before had such a fair prospect of rejoining his comrades safe and sound as he has now.

In the care of the insane, too — care not only in the sense of humane treatment, but in the systematic employment of measures for their restoration to mental soundness — the century has been marked by notable progress. This has been chiefly in the direction of preventing insanity, and although mental disease is said to be on the increase, it may undoubtedly be said with entire truth that its growing prevalence is not in proportion to the heightened frequency of "the strenuous life." We may confidently expect that a more pronounced mastery over diseases of the mind will come when physicians in general are taught psychiatry clinically, so that the beginnings of mental alienation may be intelligently met by the family practitioner.

The supreme achievement of the medicine of the Nineteenth Century undoubtedly has been the development of its preventive feature. When we recall the fact that but a few years ago an attack of infectious disease was interpreted as a visitation of Providence, by a perversity that even the triumphs of vaccination did not serve to do away with; when we contemplate the well-ordered and well-understood measures that are now resorted to in an ever-increasing number of communities (and resorted to not solely on the outbreak of an epidemic, but at all times), to purify the air we breathe, the food we eat, and the water we drink; and when we reflect upon the greatly reduced morbidity as

well as mortality of most infectious diseases—we must realize the immense service that has been rendered by preventive medicine. No doubt we must all die some time, and the day is yet far remote when the only causes of death will be old age and injury; but a decided prolongation of the average lifetime, such as the life-insurance companies recognize, is an unquestionable gain to the human race.

A great blessing that has been brought about in great measure by medical men has been the establishment of the profession of nursing. The work of caring for the sick between the physician's visits is no longer, at least in large communities and in cases of severe illness, left to over-sympathetic and uninstructed relatives or to outsiders who traded on mystery. An intelligent and intelligible record is now kept of all important happenings in the sick room, remedies are administered as they were ordered, needless alarm at something deemed by the patient to be of ill omen is quelled, and in case of real emergency, overlooked as it might otherwise have been, the physician is summoned to meet it. The advent of the trained nurse marked an era in medicine.

The literature of medicine has fully kept pace in volume with the progress of the art itself, and its quality has steadily improved. To this the great tomes of that gigantic work, the "Index-Catalogue of the Li-

brary of the Surgeon-General's Office, United States Army," bear solid testimony. It is a consolidated catalogue, by subjects and by authors' names, of practically every medical book published throughout the world and of every article in the periodical literature of medicine. For its existence the world is indebted to Dr. John S. Billings, formerly a surgeon of high rank in the army and now the director of the New York Public Library, and for its continued existence to the United States Government, and it is to be hoped that Congress will never cease to provide adequately for its continued publication. Its completeness and its accuracy long ago led to its being prized everywhere.

There are some problems of which medicine has hardly yet entered upon the solution. Prominent among them is that of cancer. Little as we now know of the real nature of that disease, we know quite as much of it as we knew but a few years ago concerning other diseases equally destructive and far more prevalent, which, however, we have now practically mastered. Who can say that we shall not triumph over cancer while the Twentieth Century is still young? Our final triumph is indubitable.

The strongest individuality in the medicine of the Nineteenth Century was without doubt that of Rudolf Ludwig Karl Virchow (commonly written by him

simply Rudolf Virchow). Although he took no direct part in any of the striking advances in practice that appeal to the laity, yet he was recognized the world over, among all classes of educated and well-informed persons, as the one beacon light of Nineteenth-Century medicine whose glow had been the steadiest and the most enduring. This is because of the wide range of his learning in matters not pertaining closely to his profession. His professional brethren hold the same view, and this is because he so well controlled himself — checked himself at every turn by the severest application of system — that he continued for more than half a century an anchor to hold medical thought strictly down to fact. This was from no natural lack of volatility, for he was an *Acht-und-vierziger* (Forty-eighter). In 1846, as a prosector in the University of Berlin, Virchow entered with Reinhardt upon a series of pathological investigations which at once received wide attention. In conjunction with Reinhardt, he founded the *Archiv für pathologische Anatomie und Physiologie und für klinische Medicin*[1] (a periodical familiarly called "Virchow's *Archiv*"), the publication of which was begun in the year 1847. Reinhardt died in 1852, leaving the editorship in the hands of Virchow alone, and he was still its editor up to the time of his death, on September 5, 1902.

[1] Archives of Pathological Anatomy and Physiology and of Clinical Medicine.

In consequence of his having openly proclaimed himself a Democrat in 1848, Virchow was forced to retire from the University of Berlin in the following year. He was at once made a professor in the University of Würzburg, whence seven years later, in 1856, as the result of the strenuous interposition of various medical organizations, he was recalled to Berlin, where he was made a professor and director of the Pathological Institute. He was appointed medical privy councillor in 1874, having several years before that entered upon an active political career and been one of the founders of the Progressive party, which he ably represented in the Landtag and the Reichstag. In 1869 he took part in founding the German and the Berlin Anthropological Societies, of each of which he was several times president.

Virchow investigated the most diverse subjects, as his profound studies of Schliemann's discoveries, as well as his other archæological researches, show, and he was a rather prolific writer. The most important of his early works was *Die Cellularpathologie*, the first edition of which was published in 1858. Chance's English translation appeared in 1860, and Picard's French version came out in 1861. It is safe to say that no book of the century exerted a profounder influence on medical thought than Virchow's exposition of the cellular pathology. His next notable pub-

lication was a collection of thirty lectures on Tumors (*Die krankhaften Geschwülste*,[1] Berlin, 1863–67). That he was not too absorbed in these lectures to bring his great powers to bear upon topics of the day is shown by the fact that before their publication was completed he brought out his work on Trichinæ (*Darstellung der Lehre von den Trichinen*, 1864). Old age found him with industry and versatility unabated, for it was in 1892 that his *Crania ethnica americana* appeared, and after that time he wrote a vigorous protest against the new-fangled spelling of the German language which he accused the schoolmasters of trying to foist on the people. This was published in his *Archiv*. It may well be that his arguments have not been unavailing, since it is observable that several German publications that had adopted the new spelling have now dropped it.

It must not be supposed that it was by his literary work alone, founded though it was manifestly on his profound study, that Virchow impressed his personality upon medicine; it was in his lectures and in his laboratory teaching, too, that he made himself felt. In all civilized countries there are many devoted workers in medical science who caught their first real inspiration from Virchow.

The writer once saw Virchow — only once, but it

[1] Morbid Tumors.

was a sight never to be forgotten. It was at a banquet given as one of the festivities incident to the annual meeting of the British Medical Association in London in 1873. The company was not a large one, but it included such celebrities as Professor J. Burdon Sanderson, Sir William Jenner, Professor Chauveau, and Professor Marey. Virchow was conspicuously the man toward whom the eyes of all others were oftenest directed. Virchow met with the love as well as the admiration of his contemporaries, and both sentiments will descend to their successors, for his impress on the records of medicine is indelible, both as an instructor and as a friend of all real truth-seekers.

AUTHORITIES.

There is no full and connected account of the progress of medicine during the Nineteenth Century, but the reader may consult with profit the various medical biographies, also the following works: Silliman's "A Century of Medicine and Chemistry;" Jenner's "The Practical Medicine of To-day;" Buck's "Reference Handbook of the Medical Sciences;" Eulenburg's "Real-Encyclopädie der gesammten Heilkunde;" the "Annus Medicus," published in the *Lancet* at the close of each year; and Tinker's "America's Contributions to Surgery" (Bulletin of the Johns Hopkins Hospital, Aug.-Sept., 1902).